



Lincoln, NE StarTran

Public Transportation Agency Safety Plan – Annual Update

December 2022

Accountable Executive: Elizabeth Elliott

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Introduction

Document Organization

StarTran is committed to providing a safe work environment for employees and visitors and a safe operating environment for customers and travelers throughout Lincoln who interact with StarTran. To ensure the plan complies with 40 U.S.C 5329 and 40 Code of Federal Regulations (CFR) 673, sections following this introduction adhere to the sample structure provided by the Federal Transit Administration (FTA) in *Public Transportation Agency Safety Plan Template for Bus Transit* (December 31, 2019). The Appendix contains definitions, background, process, and supplementary documents.

This plan complements the StarTran System Security and Emergency Preparedness Plan (SSEPP). The current SSEPP (2016) overlaps in many of the topic areas identified through the federal guidance to be addressed in the ASP. Thus, to reduce duplication of effort in future updates and use application of actions from the plans, StarTran has reviewed each of the planning and operations documents addressing safety and has documented the primary source for information and direction. The ASP addresses hazards that arise during day-to-day operations, while the SSEPP addresses the agency's response to external threats, such as extreme weather and intentional attacks. A third plan, the Transit Development Plan, contains up-to-date information about the size, service schedule, and other characteristics of the StarTran system. Table 1 provides a quick guide to the contents of each document.

Plan Development

This plan represents an annual update to the 2021 StarTran Agency Safety Plan (ASP).

Beginning in Fall of 2019 StarTran and the Nebraska Department of Transportation (NDOT) drafted the StarTran Agency Safety Plan (ASP), with the assistance of SRF Consulting Group, Inc. During this process, a series of four workshops provided opportunities for input and collaboration by StarTran and other Lincoln staff. Participants included key StarTran staff.

Topics covered in each workshop are provided below:

- Workshop 1 introduced the Public Transportation Agency Safety Plan (PTASP) and Safety Management Systems (SMS) process, identified the roles and responsibilities of the Accountable Executive and the Chief Safety Officer, and included a discussion on the desired deliverables.
- Workshop 2 covered the current safety practices at StarTran and the revisions necessary to move towards a SMS approach, established the safety culture, set seven safety performance targets, introduced the hazard risk matrix, and identified hazards staff encountered over the past five years.
- Workshop 3 focused on risk management through assigning hazards to the hazard risk matrix. This workshop assessed the likelihood and severity of identified hazards and discussed concepts

for mitigation for the hazards. By running through examples encountered over the past five years, personnel gained practice at identifying and mitigating hazards in the future.

- Workshop 4 synthesized the input received during the first three workshops by presenting the draft safety plan for comments and revisions.

Table 1. Plan Comparison Matrix

Element Descriptions	Resident Document		
	ASP	SSEPP	Transit Development Plan
Goals/Objectives/Targets			
Safety	■	■	
Security		■	
Transit System Description			■
Roles and Responsibilities			
Safety	■		
Security		■	
Safety Management Policy	■		
Safety Risk Management	■		
Threat and Vulnerability Identification/Resolution		■	
Safety Assurance	■		
Safety Promotion	■		

Outcomes from the workshops are reflected throughout the plan in call-out boxes, and full meeting records are included in the Appendix. This plan is a “living document,” tested and reaffirmed through daily executed processes and with annual reporting and updates to the plan to be recorded as revisions.

About StarTran

Information outlining StarTran operations and organization is provided in the Lincoln Transit Development Plan (August 2022). StarTran directly operates both fixed route bus service and paratransit demand response bus service. Both modes are covered in this Agency Safety Plan. StarTran employs approximately 145 staff members, with a majority in safety-sensitive positions.

The StarTran ASP and Safety Management Systems

Moving Ahead for Progress in the 21st Century (MAP-21) granted the FTA the authority to establish and enforce a comprehensive framework to oversee the safety of public transportation throughout the United States. It provided an opportunity for FTA to assist transit agencies in moving towards a more holistic, performance-based approach known as the Safety Management System (SMS).

Figure 1. SMS Elements



SMS is a formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. It includes systematic procedures, practices, and policies for managing risks and hazards, and consists of four primary elements:

- **Safety Management Policy:** A transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees regarding safe practices.
- **Safety Risk Management:** A process within a transit agency's Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- **Safety Assurance:** A process within a transit agency's Safety Management System that functions to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information.
- **Safety Promotion:** A combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.

Existing StarTran Policy & Protocol

StarTran has other plans and policies that complement the ASP by elaborating on detailed aspects of day-to-day operations. They include but are not limited to the following plans. Links to the listed plans are included in the Appendix.

- StarTran Maintenance Plan (December 2022)
- Drug and Alcohol Testing Program and Policy (August 2018)
- Bus Passenger Behavior Policy

COVID-19 Response

The COVID-19 Pandemic has impacted StarTran operations in several ways. In response to these challenges StarTran has made several changes to ensure the safety of bus passengers and employees:

- Free fare beginning April 2019
- Mask mandate for bus riding passengers. Free face mask for all customers
- An electrostatic sprayer is used to sanitize buses every evening.
- Driver barriers installed on all fixed route buses.
- Face masks, disposable gloves and hand sanitizer are provided to all employees.
- Hand sanitizer dispensers installed on new fixed route buses

1. Transit Agency Information

Table 2 provides an overview of StarTran’s contact persons and other information of immediate relevance to the FTA.

Table 2: Transit Agency Information

Transit Agency Name	Lincoln StarTran
Transit Agency Address	710 J St, Lincoln, NE 68508
Name and Title of Accountable Executive	Elizabeth Elliott, Director of Lincoln Transportation & Utilities
Name of Chief Safety Officer or SMS Executive	Colin Clark, Safety & Training Specialist
Modes of Service Covered by This Plan	Motor Bus (Fixed Route) and Demand Response (Paratransit)
All FTA Funding Types	5303, 5307, 5337, and 5339
Modes of Service Directly Provided by the Transit Agency	Motor Bus (Fixed Route) and Demand Response (Paratransit)
Does the agency provide transit services on behalf of another transit agency or entity?	No
Description of Arrangement(s)	N/A
Name and Address of Transit Agency(ies) or Entity(ies) for Which Service is Provided	N/A

2. Plan Development, Approval, and Updates

The Agency Safety Plan for StarTran is a “living document.” As major revisions occur, the entire plan will be reproduced and distributed. For minor revisions, only the affected pages will be issued. Upon reception, previous revisions of the document shall be destroyed. Table 3 documents the most recent approvals of this plan, and Table 4 records the complete history of successive versions.

Table 3: Plan Development, Approval, and Updates

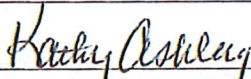
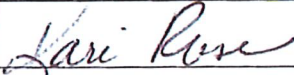
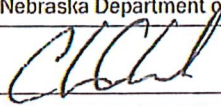
Name of Entity That Drafted This Plan	Nebraska Department of Transportation	
Signature by the Accountable Executive	Elizabeth Elliott Digitally signed by Elizabeth Elliott Date: 2022.12.22 07:21:26 -06'00'	
	Elizabeth Elliott, Director of Lincoln Transportation & Utilities	Date of Signature
Approval by the Board of Directors or an Equivalent Authority	 Vice Chair, StarTran Advisory Board	12/19/22
		Date of Approval
Certification of Compliance	 Kari Ruse, Transit Manager Nebraska Department of Transportation	12/28/22
		Date of Certification
	 Colin Clark, Safety & Training Specialist	12/19/22

Table 4: Version Number and Updates

Version Number	Section/Pages Affected	Reason for Change	Date Issued
Rev. 0	Full Document	Initial ASP developed May 2020 by NDOT and SRF Consulting Group, Inc., in consultation with StarTran management.	July ____, 2020
Rev. 1	Page 4	Added language regarding COVID 19 response	June 1, 2021
Rev. 2	Page 9	Safety Performance Targets updated	June 1, 2021
Rev. 3	Page 5	Chief Safety Officer named (Safety & Training Specialist)	April 29, 2022
Rev. 3	Page 8-9	Safety Performance Targets updated	December 5, 2022
Rev. 3	Page 14	Authorities, Accountabilities, Responsibilities update	January 20, 2022
Rev. 3	Page 26	ELDT language added	January 20, 2022
Rev. 4	Page 18	Required FTA updates per Bipartisan Infrastructure Law	December 5, 2022

Annual Review and Update of the Agency Safety Plan

The StarTran ASP, including the Safety Management Policy Statement, is reviewed annually (January of each year) to ensure it remains relevant and appropriate to the agency's safety objectives and safety performance targets, per § 673.11(a)(5). Following review and updating as warranted, the plan is approved by the Lincoln Transportation and Utilities Director, StarTran Advisory Board and the Nebraska Department of Transportation (NDOT) Transit Manager.

As a component of the annual ASP review process completed in January of each calendar year, StarTran will communicate updated safety performance indicators to the NDOT and the Lincoln Metropolitan Planning Organization (MPO), to aid in their planning processes. In coordination with the State and MPO, StarTran may adjust its safety performance targets or develop new safety performance measurement areas for tracking and monitoring by the agency.

Updates to the ASP are recorded in the Version Number and Updates, including a version history. All documentation shall be retained for a minimum of three years.

3. Safety Performance Targets

Clearly defined safety goals, objectives, and targets are key elements of StarTran’s policy and strategic planning. Goals are general descriptions of desirable long-term impacts, while objectives are more specific statements that define measurable results. StarTran has established high-level goals and objectives that guide safety activities at the agency (Table 5).

Table 5: StarTran Safety Goals and Objectives

Goal 1: StarTran will create a culture that supports employee safety and security and safe system operation (during normal and emergency conditions) through motivated compliance, rules and procedures, the appropriate use and operation of equipment, and an active safety promoting role for everyone in the organization
Objectives
Actively participate in the City-Wide Safety Committee
Establish regular transit safety meetings to address training needs, review events and near misses, and to develop safety awareness activities and programs
Enhance safety input and feedback processes, including creating a more rotund employee reporting program
Increase employee safety training opportunities
Goal 2: StarTran encourages safe system operation through identifying hazards, mitigating risk, and reducing occurrences
Objectives
Implement and maintain a hazard identification and risk assessment program, and based on the results of this program, establish a course of action for improving safety and reducing hazards
Achieve a level of safety performance that meets or exceeds the agency’s established performance targets

Where it is appropriate and feasible, StarTran assigns numerical metrics and target values to its safety performance. This ASP specifies seven performance targets for each service mode the agency operates, based on the safety performance measures established under the [National Public Transportation Safety Plan](#). They are:

- Fatalities: Total number of reportable fatalities and rate per 100,000 vehicle revenue miles
- Injuries: Total number of reportable injuries and rate per 100,000 vehicle revenue miles
- Safety Events: Total number of reportable events and rate per 100,000 vehicle revenue miles (event, as defined in § 673.5)
- System Reliability: Mean (or average) revenue miles of service between major mechanical failures

Through discussion in Workshop 2, the target for each performance measure was established as a trend rather than a specific numeric value. Across each measure, the target is to demonstrate an incremental improvement over an established baseline calculated from a recent five-year experience in each category. Current baselines were set as the averages of the performance measures from 2015 to 2019. StarTran will seek annual improvements over this baseline from 2020 through 2024, when a

new five-year baseline will be set. If the average was already at zero, the target will remain zero. The targets for each mode are shown in Table 6 and Table 7.

In a plan such as the ASP, it is critical to demonstrate a connection between the performance measures and system goals. Thus, which of the safety goals each performance measures supports by mode is included in the tables.

Table 6: Fixed Route Safety Performance Baseline and Targets – 2020 - 2024

Safety Performance Category		2015-2019 Baseline	Target	2021 Value	Target Met (Y/N)
Fatalities	Total	0	0	0	N
	Rate per 100,000 VRM	0	0	0	N
Injuries (Minor/Major)	Total	2.6	Reduction from baseline	1	Y
	Rate per 100,000 VRM	0.16	Reduction from baseline	.065	Y
Safety Events (Minor/Major)	Total	1.4	Reduction from baseline	1	N
	Rate per 100,000 VRM	0.09	Reduction from baseline	.065	N
System Reliability (Minor/Major)	VRM Between Failures (Total)	4,000	Increase from baseline	3,717	N

Table 7: Paratransit Safety Performance Targets – 2020 - 2024

Safety Performance Category		2015-2019 Baseline	Target	2021 Value	Target Met (Y/N)
Fatalities	Total	0	0	0	Y
	Rate per 100,000 VRM	0	0	0	Y
Injuries (Minor/Major)	Total	0	0	0	Y
	Rate per 100,000 VRM	0	0	0	Y
Safety Events (Minor/Major)	Total	0	0	0	N
	Rate per 100,000 VRM	0	0	0	N
System Reliability (Minor/Major)	VRM Between Failures (Total)	14,200	Increase from baseline	16,710	Y

Major and Minor Events

In describing these categories, the definitions for “major” and “minor” from the National Transit Database (NTD) are as follows:

- **Reportable Event (Major):**

A safety event occurring on transit right-of-way or infrastructure, at a transit revenue facility, or at a transit maintenance facility during a transit-related maintenance activity or involving a transit revenue vehicle that results in one or more of the following conditions:

- A fatality confirmed within 30 days of the event
- An injury requiring immediate medical attention away from the scene for one or more person
- Property damage equal to or exceeding \$25,000
- Collisions involving transit revenue vehicles that require towing away from the scene for a transit roadway vehicle or other non-transit roadway vehicle
- An evacuation for life safety reasons

- **Non-Major Summary Incident/Event (Minor)** are less severe incidents or events that do not meet the requirements of Reportable Events:

- Other safety occurrences not otherwise classified (injuries); and
- Fires

- **Major mechanical system failures**, as defined by the NTD, are those that limit actual vehicle movement or create safety issues. This includes but is not limited to failures involving:

- Brakes

- Doors
- Engine cooling systems
- Steering, axles, and suspension
- **Minor mechanical system failures** are failures of some other mechanical element of the revenue vehicle not caused by a collision, natural disaster, or vandalism, but that, because of local agency policy, prevent the revenue vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip even though the vehicle is physically able to continue in revenue service. They include but are not limited to issues involving:
 - Fareboxes
 - Wheelchair lifts
 - Heating, ventilation, and air conditioning systems

ESTABLISHING A BASELINE

Introduced in Workshop 1, the process to establish the seven safety targets involved a discussion on what is measurable and what is achievable. The workshop participants considered multiple approaches to set the targets, including the five-year average for StarTran, the averages among its peers from the last TDP, and targets established in completed safety plans from across the county. Using internal safety numbers would require the smallest time commitment and would be the most practical to keep track of over time. All participants agreed to strive for an improvement over current performance.

Safety Performance Target Coordination

StarTran provides up-to-date editions of this plan, including safety performance targets, to the Lincoln MPO and the NDOT, in accordance with § 673.15(a) and § 673.15(b). The most recent dates of transmission are shown in Table 8.

Table 8: Safety Performance Target Coordination

Targets Transmitted to the State	State Entity Name	Date Targets Transmitted
		Nebraska Department of Transportation
Targets Transmitted to the MPO	MPO Name	Date Targets Transmitted
		Lincoln Metropolitan Planning Organization

4. Safety Management Policy

Safety Management Policy Statement

StarTran prioritizes safety as the positive effects influence every aspect of service. Identifying and addressing potential threats and hazards can save lives, reduce injuries, improve service and help manage costs.

StarTran uses the Safety Management Systems (SMS) framework to make informed decisions appropriate for operations, passengers, employees and how we interact with the community. As an agency we are committed to the following objectives:

- Actively participate in the City-Wide Safety Committee (additional information regarding the Committee is included in Chapter 5 and Chapter 6)
- Establish regular transit safety meetings to address training needs, review events, and to develop safety awareness activities and programs
- Enhance safety input and feedback processes
- Increase employee safety training opportunities
- Implement and maintain a hazard identification and risk assessment program, and based on the results of this program, establish a course of action for improving safety and reducing hazards
- Achieve a level of safety performance that meets or exceeds the agency's established performance targets

Promoting a non-punitive safety culture is a critical element of the SMS framework. StarTran management is fully committed to ensuring that the employee safety reporting processes established within this plan allow all employees to report safety hazards to senior management without concern of retribution. Except in the instance of willful safety rule violations as defined in the employee handbook, StarTran employees reporting safety hazards shall not be subject to disciplinary action.

Elizabeth Elliott Digitally signed by Elizabeth Elliott
Date: 2022.12.22 07:28:02 -06'00'

Accountable Executive & Director, Transportation and Utilities

Date

Safety Management Policy Communication

Per § 673.23(c) and § 673.29(b), StarTran communicates its safety management policy within the organization in three ways. 1) All personnel receive the Rules and Regulations handbook that includes the safety policy statement. 2) Staff can access the complete ASP digitally and in hard copy at the StarTran main office. 3) During orientation new employees are introduced to agency safety programs.

Authorities, Accountabilities, and Responsibilities

The Director of Lincoln Transportation & Utilities serves as the agency's **Accountable Executive** and has the authority to develop and execute the StarTran ASP. The Director is accountable for the agency's safety and the maintenance of the SMS program.

StarTran has a **Safety and Training Specialist**. The Safety and Training Specialist will serve as StarTran's **SMS Executive/Chief Safety Officer** responsible for day-to-day implementation and management of the ASP and the SMS process. This position will report directly to the Director of Lincoln Transportation & Utilities, and they will meet regularly to discuss the agency's safety performance and advancement of the SMS within StarTran, in accordance with § 673.23(d)(2). In order to work effectively and maintain consistent lines of communication, the Safety and Training Specialist may convene a standing Safety Committee with executive managers and department representatives.

Other senior staff at StarTran hold important roles in ASP development, implementation, and management. Table 9 gives an overview of these roles and responsibilities.

Safety Reporting-Response Opportunities

StarTran is committed to providing a safe work environment for employees and visitors and for responsible operations throughout Lincoln. Thus, it is imperative that StarTran employees and stakeholders have convenient and available means to report incidents and occurrences which may compromise the safe conduct of StarTran operations. StarTran encourages employees, customers and community stakeholders to report activities/conditions that may affect the integrity of transit safety. Such communication must be completely free of any form of reprisal, per § 673.23(b) and § 673.23(c).

StarTran's Rules and Regulations handbook, as well as the Bus Operator's Manual, outline the reporting methods available to employees. StarTran will not take disciplinary action against any employee who discloses an incident or occurrence involving transit safety. This policy shall not apply to information received by StarTran from a source other than the employee, or which involves an illegal act, or a deliberate or willful disregard of StarTran regulations or procedures.

Table 9: ASP Senior Staff Tasks and Responsibilities

Legend		Director	Safety Training Coordinator	Planner	Operations Supervisor	Maintenance Supervisor
P – Primary or Lead Responsibility						
S - Secondary Responsibility						
Task						
Plan Development	Establish PTASP policy	P	P	S	S	S
	Establish PTASP policies, goals, objectives	P	P	P	P	P
	Establish PTASP organization	P	P	P	P	P
	Establish PTASP roles and responsibilities	P	P	P	P	P
	Establish a PTASP review and renewal schedule	P	P	S	S	S
	Develop and track PTASP targets	S	P	P	S	S
	Conduct preliminary Hazard and Threat & Vulnerability Assessment	P	P	P	P	P
	Assess and resolve identified risks	P	P	S	P	P
Plan Implementation and Management	Document serious and/or repeated safety violation	P	P	S	P	P
	Conduct or monitor incident/mishap response and investigation (assess trends)	P	P	S	P	P
	Provide safety and security related training	P	P	P	P	P
	Develop annual safety and security report	S	P	P	S	S
	Develop standard operating procedures related to employee safety duties	P	P	P	P	P
	Develop an effective incident notification and reporting system	P	P	S	S	S
	Support and communicate safety as the top priority to all employees	P	P	P	P	P
	Develop relations with outside organizations that may participate in and contribute to the PTASP, including local public safety and emergency planning agencies	S	P	P	S	S

The Safety Training Coordinator will be responsible for reviewing reported events and addressing events consistent with the Safety Risk Management process. The reporting and response process encompasses three phases in addressing events. Each phase is outlined below:

- Detection and reporting. StarTran provides a range of methods for employees, customers and/or others to report incidents/events covered in the safety program, including:
 - Employees: StarTran has developed an incident/event/condition reporting form through which employees can report an event that has occurred or a condition of concern that could result in a safety event. Employees are required to report accidents that involve operations, maintenance, vehicles, and/or injuries to employees.
 - Customers: Operators are instructed to contact the Operations or Maintenance Supervisor in the event of a customer reported incident/event. Reporting to the Operations or

Maintenance Supervisors initiates the incident/event review process. Additionally, the StarTran webpage provides information on how to contact StarTran to report an incident or to provide comment on service. Input from customers relative to safety incidents/concerns is directed to the Safety Training Coordinator.

- Stakeholders: Persons StarTran comes in contact with through operations or a visit to any StarTran facility can report incidents to the customer service representative or through the StarTran website. The Safety Training Coordinator will be responsible for creating displays of how stakeholders can provide their input.
- Response. StarTran is committed to open communication regarding employee, customer and stakeholder safety. Presently, there is not a formal program for wide dissemination of the outcome and/or actions with safety hazards or events reported through the range of means available. The Safety Training Coordinator's responsibilities will include establishing a range of digital, print and verbal methods through which actions taken to address hazards or events reported to StarTran are communicated internally and externally.

If the reporting employee provided their name during the reporting process, the Safety Training Coordinator ensures that they learn of any actions taken in response to their report. The identity of the reporting employee is protected to the extent permissible by law when Star Tran collects, records, or disseminates information obtained from transit safety reports.

City-Wide Safety Committee

Since 2008, the City-Wide Safety Committee has been addressing safety and health across each department of the city. The committee is composed of 14 members, with representatives from each of the six bargaining groups active in Lincoln. StarTran is represented on this committee by a member of the Amalgamated Transit Union (ATU) that represents drivers/operators and maintenance staff. StarTran representation to the Committee is from the driver/operator ranks and serves a one or two-year term. Further documentation can be found in the Appendix.

The charge of the committee is consistent with the supporting the goal of the SMS including:

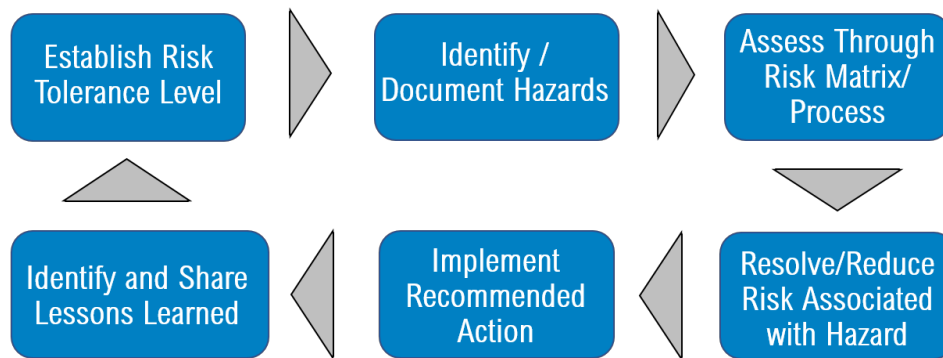
- Adopt and maintain an effective written injury prevention program.
- Promote safety at the agency.
- Make recommendations for addressing safety and health at worksites throughout the city.
- Assist in the investigation of unsafe practices or conditions which are brought to the attention of the committee and address the concerns brought to the committee.
- Review accident/injury reports and records and, if appropriate, make recommendations regarding methods to prevent a repeated occurrence in the future.

StarTran will provide the Committee with annual updates to the ASP following re-certification.

5.Safety Risk Management

The Safety Risk Management process applies to all elements of the system, including operations and maintenance (facilities and vehicles) and administration. StarTran’s risk management process begins with hazard identification, both internal and external to the StarTran facility. StarTran’s approach focuses on prevention and/or control of hazards in a systematic manner to reduce the risk of identified hazards to the lowest practical level through effective use of resources. The hazard analysis process includes a feedback loop that re-incorporates lessons learned (Figure 1) through earlier assessments.

Figure 1. Hazard Assessment Feedback Loop



In carrying out the Safety Risk Management process, StarTran uses the following terms:

- Event – Any accident, incident, or occurrence
- Hazard – Means any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment
- Risk – Composite of predicted severity and likelihood of the potential effect of a hazard.
- Risk Mitigation – Method(s) to eliminate or reduce the effects of hazards
- Consequence – Means the potential outcome(s) of a hazard

Hazard Identification

StarTran has established formal requirements for proactive identification of hazards, per § 673.25(b). The primary methods used to identify hazards and threats to the transit system are input submitted to drivers or to customer service by riders or interested stakeholder and incident reports by employees. Copies of the StarTran customer complaint form and incident report are included in the Appendix.

Employees are encouraged to report near-miss incidents, known as precursors. These incidents are more numerous than accidents and including them in the process can help identify effective mitigation and avoid more serious events.

Potential sources regularly reviewed for hazard information include, but are not limited to, the following:

Table 10: Hazard Identification Sources

Hazard Information Source	Responsibility	Review Frequency
Markout list	Maintenance Supervisor, Operations Supervisor	Daily
Dispatcher daily log	Operations Supervisor, Asst. Transit Manager	Daily
Maintenance shift reports	Maintenance Supervisor	Daily
Facility inspection or walk around reports	Maintenance Supervisor	Weekly
Statistical reports / historical data	Transit Manager, Safety & Training Specialist	Annually
Safety Assessment and System Review	Safety & Training Specialist	Annually
Facility Safety and Security Assessment	Maintenance Supervisor, Safety & Training Specialist	Annually
Internal and external audits and inspections (including FTA and NDOT audits and inspections)	Director, Planner, Safety & Training Specialist	As needed
Passenger/public customer service reports	Safety & Training Specialist	As needed
Incident/accident reports	Operations Supervisor	As needed
Information from public safety officials, local governments, and other major StarTran stakeholders	Transit Manager, Planner, Safety & Training Specialist	As needed
City of Lincoln Risk Management Division	Safety & Training Specialist	As needed
Employee safety reports to supervisors or management	All	As needed

StarTran senior management, including the Transit Manager and department heads are directly involved in hazard review and documentation. Initial hazard reports are provided to senior management through reports from Dispatch and discussion with supervisory personnel.

Risk Assessment

With implementation of the initial ASP in 2020, StarTran is committed to conducting a formal analysis and evaluation process of reported hazards to ensure they are addressed. The steps StarTran employs to assess risk are outlined in the bullet points below and are recorded in Table 11:

- Step 1: Document the Risk or Event.** Sources of risks or events addressed through the assessment process include complaints received from customers/visitors/stakeholders, incident reports submitted by employees, and observations recorded by employees and submitted to the Safety Training Coordinator or to a supervisor.

- **Step 2: Characterize the risk.** Consistent with the FTA Sample Safety Risk Assessment Matrices for Bus Transit Agencies (September 2019), StarTran identifies the likelihood and potential severity of consequences associated with each identified risk or event. StarTran employs a “worst credible consequences” definition to characterization of risks, meaning the outcome is realistic and imaginable in day-to-day operations, but is not the worst possible consequence. Definitions applied in the process are provided in the next section.
- **Step 3: Describe the current actions to reduce risk.** StarTran employs a range of practices promoted to employees through pre-employment training in their profession, on-going safe operating and/or practices training, distributing operating and maintenance manuals, etc. Applicable actions currently being deployed are documented in the risk assessment process.
- **Step 4: Assess current practices.** Understanding new or modified methods for safe operations and maintenance practice are continuously being developed, StarTran acknowledges the need to periodically assess current practices and safety events to determine the need to revise promoted practices. Through regular application and documentation of the Risk Assessment process, StarTran staff included in risk evaluation workshops consider and discuss other actions to better address observed or anticipated events.

To assess the risk level of a given hazard, experienced personnel at StarTran use a standardized tool, the Risk Assessment Matrix. Results of the risk assessment process will help determine whether the risk is being appropriately managed or controlled. If the risk is acceptable, the hazard will simply need monitoring. If the risk is unacceptable, StarTran will take steps aimed at lowering risk to an acceptable level, or to remove or avoid the hazard.

The Safety Training Specialist (Chief Safety Officer) will be responsible for coordinating the risk assessment process, consulting with senior management, supervisors, external subject matter experts, and federal and state bodies as necessary. The goal is to consider all human factors, environmental factors, supervision elements, and organizational elements.

The StarTran senior management team, including the Director and Chief Safety Officer, is directly involved in the review of all hazards, with the exception of those that have been immediately mitigated by frontline employees or minor disciplinary actions in response to rule violations not constituting systematic, widespread issues.

The Safety Training Specialist will also be responsible for:

- Developing strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions, and consistent with guidelines of the Centers for Disease Control and Prevention or a State health authority, minimize exposure to infectious diseases.
- Developing a risk reduction program for transit operations to improve safety by reducing the number and rates of accidents, injuries, and assaults on transit workers based on data submitted to the national transit database

Table 11: Hazard Identification and Risk Assessment Log

Risk Description	Risk Level			Current Measures to Reduce Risk	Further Action Required to Reduce Risk	Staff Responsibility
	Risk Likelihood	Risk Rating Severity	Hazard Risk Index			

Rating System

To organize and prioritize identified hazards, StarTran defines severity according to the following scale:

- Catastrophic – I: Conditions are such that human error, environment, design deficiencies, element, subsystem or component failure, or procedural deficiencies may commonly cause death or major system loss and require immediate termination of the unsafe activity or operation.
- Critical – II: Conditions are such that human error, environment, design deficiencies, element, subsystem or component failure or procedural deficiencies may commonly cause severe injury or illness or major system damage and require immediate corrective action.
- Marginal – III: Conditions may commonly cause minor injury or illness or minor systems damage such that human error, environment, design deficiencies, subsystem or component failure or procedural deficiencies can be counteracted or controlled without severe injury, illness or major system damage.
- Negligible – IV: Conditions are such that personnel error, environment, design deficiencies, subsystem or component failure or procedural deficiencies will result in no, or less than minor, illness, injury or system damage.

StarTran and Omaha Metro have reviewed the generalized definitions of probability of an event occurring and have refined the operating hours between occurrences to reflect local conditions. Listed below are the StarTran probability of occurrence definitions:

- Frequent – A: Continuously experienced; mean time between events (MTBE) is less than 3,000 operating hours.
- Probable – B: Will occur frequently; MTBE is between 3,000 and 100,000 operating hours.

- Occasional – C: Will occur several times; MTBE is between 100,000 and one million operating hours.
- Remote – D: Unlikely but can reasonably be expected to occur; MTBE between one and 10 million operating hours.
- Improbable – E: So unlikely, it can be assumed occurrence may not be experienced; more than 10 million operating hours between events.

StarTran determines the overall risk presented by each hazard using a composite measurement of the hazard severity and probability according to the risk assessment matrix shown in Table 12. The matrix is broken down into the categories of High, Moderate, and Low. This standardized hazard analysis matrix helps staff to focus first on the most serious safety hazards requiring resolution. Hazards identified as “High” will require StarTran to further evaluate the potential consequence/condition and identify a mitigation strategy. A “Moderate” rating in the matrix indicates that countermeasures should be implemented, within fiscal constraints of the agency. A “Low” rating means that StarTran may accept the risk without providing any countermeasures.

Table 12: Risk Assessment Matrix

Frequency of Occurrence	Hazard Categories			
	A Catastrophic	B Critical	C Marginal	D Negligible
(1) Frequent	1A	1B	1C	1D
(2) Probable	2A	2B	2C	2D
(3) Occasional	3A	3B	3C	3D
(4) Remote	4A	4B	4C	4D
(5) Improbable	5A	5B	5C	5D

Hazard Risk Index	Risk Decision Criteria	
■ 1A, 1B, 1C, 2A, 2B, 3A	High (H)	Hazard must be mitigated.
■ 1D, 2C, 2D, 3B, 3C, 4A, 4B, 5A	Medium (M)	Hazard should be mitigated if possible within fiscal constraints.
■ 3D, 4C, 4D, 5B, 5C, 5D	Low (L)	Hazard is acceptable with review by management.

Once a hazard analysis is performed to define its potential severity and probability of occurrence, the project team must work to address, or resolve, such hazards. Hazard resolution is defined as the analysis and subsequent actions taken to reduce to the lowest level practical the risk associated with an identified hazard.

Risk Mitigation

If the assessment process indicates a need for mitigation, then StarTran executive, operations, and maintenance management develop corrective actions in consultation with frontline personnel and subject matter experts as necessary.

Hazard Tracking and Recordkeeping

The Safety Training Specialist will be tasked with maintaining a record of current and past risk assessment reviews using the Hazard Identification and Risk Assessment Log. This document serves as a unified repository for data and information related to the proactive and reactive identification of hazards, as well as the results of the StarTran hazard analysis process and any corrective actions developed under the safety risk mitigation process.

Mitigation Actions

Mitigation can take a wide variety of forms, some of them standard and some creative. Actions fall into the following categories:

- **Physical Defenses:** These include objects and technologies that are engineered to discourage, or warn against, or prevent inappropriate action or mitigate the consequences of events (e.g. traffic control devices, fences, safety restraining systems, transit controls/signals, transit monitoring systems, etc.).
- **Administrative Defenses:** These include procedures and practices that mitigate the likelihood of accident/incident (e.g. safety regulations, standard operating procedures, personnel proficiency, supervision inspection, training, etc.).
- **Behavioral Defenses:** These include behavioral interventions through education and public awareness campaigns aimed at reducing risky and reckless behavior of motorists, passengers and pedestrians – factors outside the control of the agency.

Documentation and Reporting

StarTran will incorporate the risk assessments completed within the period between ASP re-certifications. An updated risk matrix will be incorporated into the appendix of the re-certified document.

StarTran will provide updated re-certified versions of the ASP to the City-Wide Safety Committee for their information.

TRAINING QUALITY CONTROL

During Workshop 3, participants discussed the safety event in which bus drivers pull out from a stop too quickly, causing passengers to fall. They rated it as 3C – marginal and occasional – because injuries are usually minor. Drivers are currently trained to wait until passengers are stable, but sometimes they are running late and feeling rushed. The group suggested several possible administrative defenses: bringing in recurring training, including questions about standard operating procedure in a driver’s annual review, and running “secret shopper” audits with the intent to educate rather than punish. These actions would all fall to the Operations function to implement.

6. Safety Assurance

Safety assurance processes clarify how safety performance is evaluated and how lessons learned will inform and improve the organizational culture. They provide the necessary feedback to ensure that the SMS is functioning effectively and that StarTran is meeting or exceeding its safety objectives.

Compliance Monitoring

Supervisors within the operations and maintenance functions directly monitor compliance with safety procedures. For example, facility walkarounds include an inspection of shop areas, parts storage, the maintenance facility bus wash, and vehicle storage to evaluate safety rules compliance and shop safety practices. Operators complete pre-service and post-service vehicle checks daily, reporting concerns to the Maintenance Supervisor for action. Operations personnel are observed on periodic ride-alongs.

If a supervisor or other employee observes questionable actions that reasonably could lead to a potential hazard, they are encouraged to report the condition and it will be tracked and addressed through the mechanisms described in Chapter 5, Safety Risk Management.

Mitigation Monitoring

During the annual ASP review and update, StarTran executive managers will review records produced during Safety Risk Management activities and discuss the results of the program over the year to evaluate the effectiveness of the agency's Safety Risk Management process. This review process will extend to available safety risk evaluation records, hazard identification and analysis practices, the corrective action plan process, and reviews of the Hazard Identification and Risk Assessment Log.

Investigations

Safety events are investigated either formally or informally to identify causal factors. A five-member accident review board appointed by the Transit Manager and Union President meets once a month to review any vehicle accidents involving union employees. The board uses the accident report and any employee statements to determine whether the accident was preventable and what safety recommendations it may yield. The Transit Manager reviews board findings and may ask for reconsideration at the next meeting. Further details on the board can be found in the Appendix.

Internal Reporting

Many of the hazards reported to StarTran management arrive via internal safety reporting programs. StarTran does not differentiate between internal and external reports for most purposes.

Information shared through internal safety reporting programs is reviewed, investigated, and addressed.

In accordance with §673.29(b), StarTran informs employees of safety actions taken in response to the information they report (Figure 2). This can take the form of a direct conversation with a supervisor, a companywide bulletin, an update to the training program, or another method, as appropriate to the nature of the report.

Figure 2: Employee Reporting Feedback Loop



7. Safety Promotion

Culture

StarTran believes safety promotion is critical to the success of SMS by ensuring that the entire organization fully understands and trusts the SMS policies, procedures, and structure. It involves establishing a culture that recognizes safety as a core value, training employees in safety principles, and allowing open communications of safety issues.

Positive safety culture must be generated from the top-down. The actions, attitudes, and decisions at the policy-making level must demonstrate a genuine commitment to safety. Safety must be recognized as the responsibility of each employee with the ultimate responsibility for safety resting with the StarTran Transit Manager. Employees must trust that they will have management support for decisions made in the interest of safety while recognizing that intentional breaches of safety will not be tolerated.

A positive safety culture at StarTran is defined as one which is:

An Informed Culture

- Employees understand the hazards and risks involved in their areas of operation
- Employees are provided with the necessary knowledge, training and resources
- Employees work continuously to identify and overcome threats to safety

A Just/Reporting Culture

- Employees know and agree on what is acceptable and unacceptable behavior
- Human errors must be understood but negligence and willful violations are not tolerated
- Employees are encouraged to voice safety concerns and to share critical safety information without the threat of punitive action
- When safety concerns are reported, appropriate action is taken

A Learning Culture

- Learning is valued as a lifetime process
- Employees are encouraged to develop and apply their own skills and knowledge to enhance safety
- Employees are updated on safety issues and informed of actions through feedback

Competencies and Training

StarTran maintains and implements a safety management training program to ensure employees and any contract personnel occasionally working for StarTran are trained and competent to perform

their SMS duties, per § 673.29(a). This training consists of several steps, including pre-employment screening of job-related skills for certain positions, new employee orientation, on-the-job training (OJT), and an ongoing process of refresher and familiarization training for current employees. Staff training is designed to be consistent with SMS principles. The Safety Training Specialist will provide a corporate perspective on SMS and the agency's safety culture.

Hiring and New Employee Orientation

StarTran uses pre-employment screening of job-related skills for certain positions in order to ensure new employees begin their employment with a minimum awareness and competency in core job duties and responsibilities. The department supervisors document minimum skills for new employees in job descriptions and postings.

New employee orientation represents StarTran's primary opportunity for delivery of one-on-one or small group training. Training on key safety-related topics including the drug and alcohol program is delivered through new employee orientation programs. Documentation of these orientation programs is included in the Appendix.

StarTran rules and regulations available to all employees contain information on the employee safety reporting program, which encourages employees to report safety hazards, near misses, concerns, and issues. StarTran also includes discussion of the employee safety reporting program as a formalized component of new employee orientation.

Operator/Driver Training

Drivers demonstrate skill and performance competency in the type of vehicle to which they are assigned as a part of training requirements. StarTran provides ongoing/recurring training necessary to reinforce policies and procedures as well as to provide a mechanism to brief drivers on new policies, procedures and/or regulations. Retraining is a part of the discipline program for drivers involved in incidents.

Specific training subject areas for StarTran drivers include defensive driving training and crisis management training, which are delivered either by contractors or internally, as well as voluntary CPR and first aid training.

Some training on new policies and procedures is delivered directly to drivers by Supervisors or Dispatchers on an individual basis or through bulletins and handouts.

Entry-Level Driver Training (ELDT)

FMCSA has implemented a new minimum Federal training requirement called the Entry-Level Driver Training (ELDT) to begin February 7, 2022. This requirement impacts anyone applying to obtain a Class A or B CDL for the first time, upgrade an existing CDL class, or add a passenger endorsement for the first time. ELDT specifies two types of training must be in place; theory and behind the wheel. This all must be completed before applicants take their skills test to receive their

CDL. StarTran will work to ensure all new operators meet this guideline and all documentation is present and submitted to the proper governing bodies.

Maintenance Training

The Maintenance Supervisor and senior maintenance staff provide the majority of training to junior StarTran maintenance personnel in an OJT format. Some training on new policies and procedures may also be delivered directly by Supervisors on an individual basis or through bulletins and handouts. StarTran primarily ensures that maintenance staff are sufficiently familiar with job responsibilities through pre-employment screening and verification that new hires have completed sufficient job-specific training or experiential learning prior to becoming employees.

Management and Supervisor Training

Management-level training is delivered through staff meetings and can include videos covering safety training topics or other safety-focused material. Management personnel participate in outside training courses on topics including the National Incident Management System (NIMS) and Incident Command System (ICS). Supervisors spend five days a year in training.

Training Documentation

The City of Lincoln Human Resources Department maintains complete records of all personnel training and certification activities. StarTran management periodically reviews and assesses employee training files and records to ensure completeness.

A standard checklist provides documentation for the safety components of new employee orientation. Course instructors produce records in either hard copy or digital format, and they include the date training was delivered, the instructor and/or provider of the training, the subject of the training, and a passing/failing grade or an indication of whether the training was successfully completed by each individual.

The Maintenance Supervisor ensures that OJT delivered to maintenance staff and other frontline personnel is documented in a similar manner to classroom-based training. Signoff sheets or similar records placed in individual personnel files at the conclusion of OJT indicate the date training was delivered, the instructor and/or provider of the training, the name of the trainee, the subject of training, and an indication of whether the training was successfully completed by the individual.

Training Program Evaluation

In order to address safety-related job functions of operations and maintenance positions and ensure that training gaps are addressed as necessary, the Safety Training Coordinator, Operations Supervisor, and Maintenance Supervisor periodically conduct informal analyses to determine whether gaps are present and develop new training material accordingly. The goal of these periodic analyses and assessments is to ensure that the agency has identified and provided all necessary skill

training related to safe job performance for all job functions, to the level that all employees are competent to perform their safety-related duties.

Training curricula changes implemented by management for safety-related employees include updates to reflect new techniques, technologies, the results of investigations, corrective actions, and regulatory changes. New training courses or materials may also be developed in response to FTA guidance, state oversight activity, or other industry trends and best practices.

Safety Communication

StarTran uses a variety of means to formally communicate safety policies, processes, activities, and tools to all employees. Regular communication from management to agency employees includes hazard and safety risk information of direct relevance to employees' responsibilities.

The agency's Safety Management Policy and other SMS-related processes, activities, and tools relevant to employee job responsibilities are provided to all StarTran employees as part of the Rules and Regulations handbook. Key agency safety-related plans, including the ASP and SSEPP, are retained digitally and in hard copy and are accessible to all management and supervisory employees.

The Safety Training Specialist, Operations Supervisor, and Maintenance Supervisor post safety-related bulletins and other messages in areas visible to frontline operations and maintenance employees, including breakrooms and adjacent to time clocks, and occasionally distribute bulletins and memoranda directly to individual employees via their personal mailboxes.

The Safety Training Specialist will be responsible to ensure numerical objectives, targets, and indicators are posted along with bulletins or other internal media to report on progress toward achievement of targets and indicators. Individual achievement is also recognized formally or informally. At the end of each year, any bus operator who had no preventable accidents wins a Safe Driver Award.

WHAT IS TRAINING?

During Workshop 3, participants explored what it means to call for more training on a hazard. They agreed that continuous reinforcement has already helped to eliminate some hazards. This could be as simple as workplace posters or a weekly tip. The most important part is that training is not *only* applied when employees get into trouble.

Sustaining a Safety Management System

To sustain a safety management system, StarTran will ensure that processes are employed to build an organizational foundation. Actions taken to sustain SMS include:

- **Create a measurement-friendly culture:** All staff, including department heads, should be actively engaged in creating measurement-friendly culture by promoting performance measurement as a means of continuous improvement. Senior managers will also lead by example and utilize performance metrics in decision making processes.

- **Build organizational capacity:** Investment in developing skilled human resources capacity is essential to sustaining an SMS. Both technical and managerial skills will be needed for data collection and analysis and setting goals. Managing staff and the governing board will commit the financial resources required for organizational capacity and maintaining an SMS on a continuous basis.
- **Reliability and transparency of performance results:** The SMS will be able to produce and report its results, both good and bad. Performance information should be transparent and made available to all stakeholders. Messengers should be protected to preserve the integrity of the measurement system. The focus should be on opportunities for improvement rather than allocating blame.
- **Demonstrate continuous commitment to measurement:** Visible commitment to using metrics is a long-term initiative. StarTran will demonstrate a commitment to performance measurement by establishing a formal process of reporting performance results, such as including transit safety and performance measurement as a standing agenda item at Transit Advisory Board meetings and providing relevant information to the MPO.