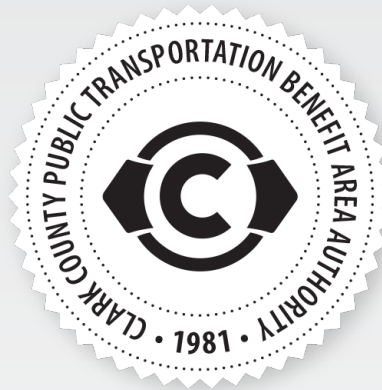


Clark County Public Transportation Benefit Area

Clark County, Washington

Public Transportation Agency Safety Plan



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April 2024

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Record of Amendment

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| October 13, 2020 | 1 | Initial document drafted by C-TRAN's Safety Chief. |
| October 1, 2022 | 2 | Review, updates to titles, updated forms, and added pandemic information. Fixed syntax, punctuation, and grammar. |
| April 2024 | 3 | Review, employee titles update, added definitions and acronyms, fixed a few grammar issues, updated the pandemic and intranet information, and reworded a few sentences for clarity. |
| | | |
| | | |

Point of Contact

Requests, interpretations, or changes to this document go to C-TRAN's primary contact below. The Safety Department reviews this plan for accuracy on a reoccurring basis once a year in October or more often as necessary.

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Executive Summary

C-TRAN provides service throughout most of urban Clark County, Washington, and express service to downtown Portland, Oregon. C-TRAN's fixed route and demand response service area includes the cities of Vancouver, Camas, Washougal, Ridgefield, La Center, Yacolt, and Battle Ground.

Managing safety and risk is at the core of C-TRAN's culture and an essential component of its business activities. C-TRAN's Public Transportation Agency Safety Plan (PTASP) is a specific element of the agency's responsibility and establishes safety policies, identifies hazards, controls risk, allows for goal setting and planning, prioritizes resources, and measures performance. The PTASP fosters agencywide support for transit safety by establishing a



culture where C-TRAN holds management accountable for safety, and everyone in the organization takes an active role in maintaining transit safety and security.

The PTASP supports safety across the system, including using performance-based targets based on data collected within C-TRAN. The PTASP is an integrated collection of C-TRAN policies, processes, and behaviors that endorse a formalized, proactive, and data-driven safety and risk management approach.

The PTASP aims to increase safety within C-TRAN's transit system by proactively implementing the four components of the Safety Management System (SMS): Safety Management Policy, Safety Risk Management, Safety Assurance, and Safety Promotion. A flexible and scalable strategic approach determines effectiveness by attaining safety performance targets and standards. The PTASP addresses the following elements:

Policy Statement - Conveys top-level management's commitment and support for the PTASP. C-TRAN's Chief Executive Officer (CEO), the executive accountable to the agency, signs the policy statement and the C-TRAN Board of Directors approves the document's contents during a Board of Directors meeting (refer to the meeting minutes).

Safety Objectives are specific, measurable, attainable safety objectives to reach C-TRAN's annual and defined safety goals.

Safety Performance Targets establish a list of quantifiable levels of safety performance established as a basis for safety performance measurability.

Safety Accountabilities and Responsibilities clearly define safety management roles and responsibilities and provide ownership at every level.

Employee Safety Reporting Program formalizes a reporting structure by empowering and encouraging employees to report safety conditions to all management personnel, void of repercussions.

PTASP Review and Record-Keeping outline an annual process used to review and update the plan, including a timeline for implementation.

Safety Risk Management Approach provides the formal hazard control processes C-TRAN uses to identify hazards; analyze, evaluate, and prioritize safety risks; and develop, implement, and evaluate risk control strategies.

Safety Assurance provides a framework for establishing Performance Indicators (PI) by continuously monitoring and evaluating the effectiveness of the PTASP.

Safety Training and Communication outline the comprehensive safety training program for C-TRAN staff, ensuring they are competent to perform their safety-

related duties and provides the means for effectively communicating safety performance and safety management information.

Safety Management Policy

C-TRAN plans, builds, and operates a regional bus transit system providing services to improve mobility for residents of Clark County, and safety is the guiding principle of C-TRAN's mission.

C-TRAN Mission Statement

C-TRAN connects people to opportunities, supports economic vitality, and enhances the quality of life for the community.

Safety Management Policy Statement

Managing risk and safety is one of C-TRAN's core business functions. C-TRAN commits to developing, implementing, maintaining, and continuously improving its processes. C-TRAN strives to ensure the agency's service delivery activities occur under a balanced allocation of organizational resources; these resources aim to achieve the industry's best safe-work practices and meet established standards.

C-TRAN's comprehensive PTASP incorporates the Safety Management Systems (SMS) and identifies the procedures and practices it follows to prevent, eliminate, control, and reduce hazards that may occur during the design, construction, procurement, and operational stages of all its transportation modes (fixed route bus, demand response, and vanpool).

It is C-TRAN's policy to fully support a proactive safety program using preventative measures to identify and resolve hazards. C-TRAN recognizes that the safety program's success depends on all employees' sincere and cooperative efforts and active participation. Each C-TRAN employee is responsible for actively participating in the safety process, providing requested information, aiding in investigations, and actively reporting and preventing hazards.

Starting with the CEO, C-TRAN management, employees, contractors, and partner agencies are accountable and responsible for upholding the best safety performance.

C-TRAN's Chief Operating Officer (COO) or designee is the agency's designated Safety Officer with oversight authority of the agency's PTASP. The Safety Officer is responsible for providing resources, executive-level safety advocacy, and direction to the Safety and Security Director for managing the day-to-day implementation and operation of C-TRAN's PTASP.

C-TRAN commits to the following:

- Support the PTASP by providing appropriate resources and visible top-level commitment to safety.
- Foster a positive safety culture and embed best practices among the primary responsibilities of all managers and employees.
- Actively manage safety with the same attention given to other C-TRAN plans and processes.
- Establish a systematic and comprehensive approach to identify, analyze, evaluate, and mitigate agency-wide safety risks.
- Integrate the PTASP and SMS into all departments at all levels.
- Establish and manage a safety reporting program to support the agency's hazard identification and safety risk evaluation process.
- Encourage frontline personnel's participation and contribution to safety. C-TRAN protects employees who disclose safety concerns from disciplinary action unless such disclosure indicates, beyond a reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of regulations or procedures.
- Provide adequate and appropriate safety-related information and job-specific safety training for all C-TRAN employees to train employees to a competency level that supports safe work performance.
- Provide skilled and trained human resources to implement safety management processes.
- Establish and measure C-TRAN's safety performance with realistic and data-driven indicators, targets, and goals.
- Comply with regulatory requirements and standards.
- Work with external systems and services supporting C-TRAN's safety performance standards.
- Review, follow, and provision appropriate resources in response to directives from federal, state, and local health officials regarding pandemics.
- In consultation and accordance with the CEO, apprise C-TRAN's Board of Directors of safety management initiatives to minimize safety risk through the strategic application of available resources.

Leann H. Lewis

Chief Executive Officer

05/15/2024

Date



Purpose and Applicability

The PTASP provides a structured safety management approach by effectively controlling operational safety risks and continuously improving safety performance by implementing the following:

- Document top-down commitments from management, employees, partners, and contractors to achieve safety performance goals.
- Establish a chain of custody documenting the implementation of the PTASP through guidelines, policies, and procedures.
- Identify roles and responsibilities for safety management outlining ownership and assurance of safety at every level.
- Establish safety goals and objectives while encouraging agency personnel and others to follow industry safety practices and federal recommendations.
- Set safety performance targets and Performance Indicators (PI) to achieve safety objectives.
- Define acceptable levels of risk as they pertain to the safety performance of provided services.
- Provide a framework and guidance to implement, evaluate, and continuously improve safety policies, safety risk management processes, and the achievement of related goals and objectives.
- Establish safety programs for the PTASP documenting C-TRAN's commitment to safety.

The PTASP applies to all C-TRAN operations and requires all divisions and departments to meet or exceed federal, state, and local standards for facilities, equipment, supplies, practices, and procedures. In addition, the individual departments document specific processes tailored to the business need of that department (department processes found in the Accident Prevention Program).

Safety Goals

Goal 1: Reduce Casualties and Occurrences - Utilize the SMS framework to identify safety hazards, mitigate risk, reduce injuries, and reduce property loss.

Goal 2: Encourage a Robust Agencywide Safety Culture - Establish a culture where management is accountable for safety, employees actively participate in transit safety, and are comfortable and encouraged to bring safety concerns forward.

Goal 3: Enhance System and Equipment Reliability - Provide safe and reliable transit operation by regularly maintaining, inspecting, and servicing all vehicles, equipment, and facilities.



Goal 4: Annual Safety Goals and Objectives - Each calendar year, the Operations and Maintenance Departments establish safety goals and objectives, which include benchmarks and PI.

Components of SMS

- *Safety Policy* - Establishes C-TRAN's commitment to improving safety by defining the methods, processes, and organizational structure to meet safety goals.
- *Safety Risk Management (SRM)* - Determines the need for, and adequacy of, new or revised risk controls based on assessing acceptable risk.
- *Safety Assurance (SA)* - Evaluates the continued effectiveness of implemented risk control strategies; supports the identification of new hazards.
- *Safety Promotion* - Provides training and communication necessary to create a positive safety culture at all levels.

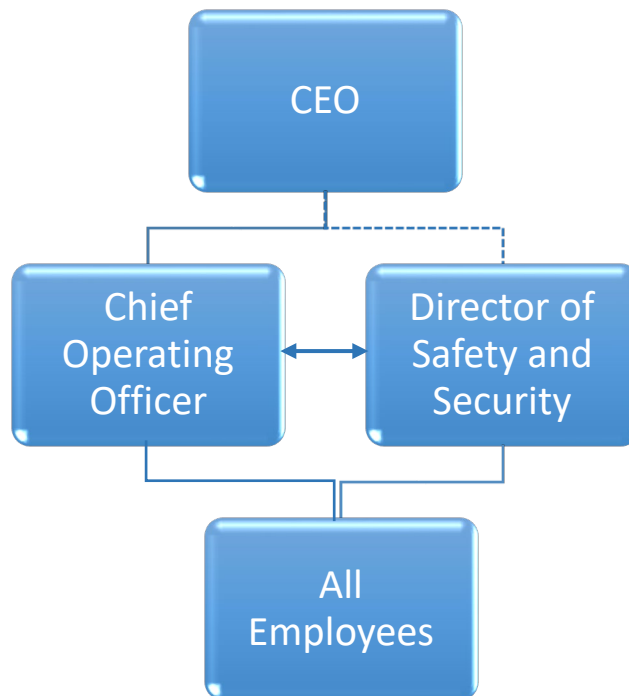


Safety Accountability and Responsibility

Employee safety is a critical component of a transit safety program. The Washington State Department of Safety and Health (WISHA) regulates employee safety and requires the following:

- A workplace free of recognized hazards
- A written Agency Safety Plan (ASP); a.k.a., Accident Prevention Plan (APP)
- Safety Committee
- Safety bulletin boards
- First Aid equipment and supplies
- Personal Protective Equipment (PPE)
- Lighting
- Housekeeping
- Potable water, restrooms, emergency wash stations, and washing facilities
- Accident reporting
- Other requirements as specified in Chapter 296 of the Washington Administrative Code

As the accountable executive, the CEO is responsible for the safe and secure operations of C-TRAN. In compliance with the PTASP, each employee carries out specific system safety responsibilities.



Safety Responsibilities

Chief Operating Officer

The COO's authority and responsibilities for the PTASP include the following:

- C-TRAN's safety advocate
- Human resource issues
- Major financial issues
- Conduct C-TRAN affairs
- Final authority under C-TRAN's authorizing legislation
- Establish and promote a safety policy
- Collaborate with the Safety and Security Department to establish C-TRAN's safety targets and objectives
- The final responsibility for the resolution of all safety issues

Chief Safety Officer

As the agency's designated Safety Officer (SO), C-TRAN's COO or designee has oversight authority and responsibility for implementing the PTASP and reports directly to the COO on issues regarding safety. The SO is responsible for providing executive-level safety advocacy and direction to the Safety and Security Director to provide resources for overall safety management at C-TRAN.

Director of Safety and Security

C-TRAN's Safety and Security Director is responsible for implementing the PTASP and has dotted-line authority to report directly to the CEO over safety issues. Duties include but are not limited to the following:

- Oversee, develop, and maintain safety policies, plans, procedures, and processes, including processes for safe work practices and the development and maintenance of a proactive PTASP.
- Provide advice during the development of data-driven safety plans and performance targets.
- Jointly engage with the Human Resources and Risk Department in safety audit activities to verify compliance with the PTASP and the Agency Safety Plan (ASP).
- Provide advice, interpretation, and recommendations concerning technical matters, including safety and system designs for new bus purchases, renovation of facilities, and the decommissioning of equipment.
 - Other areas may include standards for safe working, job hazard analysis, and assisting with the development of Standard Operating Procedures (SOPs).



- Coordinate policies, plans, standards, and programs related to Operators and public safety activities; preventing and mitigating transit worker assaults; emergency response; and security procedures for potential cyber-attacks.
- Provide support and direction for regionally based programs outlined by the Washington State Transit Insurance Pool (WSTIP) and the Federal Transit Agency (FTA)
- Participate in developing safety training, competencies, awareness, and health and wellness programs.
- Comply with environmental health and safety requirements.
- Comply with pandemic-related regulations.
- Customization of risk-based safety management programs
- Providing recommendations for the allocation of resources based on work and associated hazards.
- Measure the effectiveness of programs in a valuable and relevant format.
- Undergo continuous safety education, de-escalation training, and completion of a safety training program.

Directors, Managers, and Assistant Managers

To demonstrate their ongoing support for the PTASP, C-TRAN's Managers and Directors shall adhere to the following:

- Actively support and promote the PTASP.
- Annually review the PTASP for information relevant to individual departments
- Cooperate with the Safety and Security Director.
- Follow up on reported safety issues.
- Maintain processes and procedures for safe operations.
- Provide resources to support the PTASP.
- Continually monitor areas of responsibility.

Supervisors

To effectively implement safety policies, Supervisors provide direction to staff using monitoring mechanisms, providing information, instruction, and training. In addition, the Supervisors verify compliance with safety policies and report safety-related details to management.

Employees Safety and Health Responsibilities

C-TRAN empowers employees to make a safe and efficient workplace by following the minimum standards outlined below. Employees should also observe the safety and health responsibilities described in C-TRAN's Accident Prevention Program (APP), Transportation Services Disruption Plan (TSDP), policies, procedures, and law.



- Maintain safe work areas and keep equipment in good working condition.
- Perform jobs or tasks safely.
- Identify, assess, mitigate, and report hazards.
- Cooperate with the Safety and Security Director or designee and safety committee members.
- Monitor the activity of coworkers and alert them of potential hazards.
- Comply with established procedures and policies.
- Identify situations not covered by existing procedures.
- Use prescribed Personal Protective Equipment.
- Ask for assistance if they do not have sufficient skills, physical capabilities, or knowledge to perform the task or properly use Personal Protective Equipment.
- Stop and report work deemed unsafe.
- Model safe work behaviors.
- Document safety concerns for buses or facilities in the Electronic Asset Management System.
- Follow all directives from management regarding response to a natural or human-made disaster, including but not limited to a pandemic, earthquake, and weather-related events.

Safety Personnel

Detailed below are the duties and responsibilities of safety personnel:

- Safety manuals (Accident Prevention Plan)
- Operator's manual
- Employee Handbook
- PTASP documentation and outlined responsibilities
- Job Descriptions

Public Safety and Emergency Management Interaction

The Operations, Maintenance, and Safety departments are responsible for developing emergency plans and procedures; however, all C-TRAN departments participate in emergency planning.

Operations Department

The Operations department takes the lead in coordinating emergency response and establishes the Transit Emergency Operations Center (TEOC). The Operations Director and Safety and Security Director serve as the organization's incident commander(s) during an emergency in conjunction with the other C-TRAN staff. In addition, C-TRAN's Safety and Security Director or their designee collaborates with the Clark Regional Emergency



Response Agency (CRESA) and schedules transit-specific training for emergency responders. Detailed in the TSDP and Continuity of Operations Plan (COOP) are C-TRAN's processes and procedures for an emergency. Below is a shortened list of the Operations Department activities during an emergency:

- Emergency evacuation assistance
- Detour preparation
- Public safety radio communication
- Passenger assistance
- Emergency management liaison with CRESA
- C-TRAN TEOC activation
- Other transit-related support activities serving Clark County and other service areas

Maintenance and Facilities Department

The Maintenance and Facilities departments provide coordination to aid in the emergency response of federal, state, and local agencies and restore essential public transit services during emergencies and disasters. The Maintenance and Facilities departments are responsible for the following:

- Ensuring the safe mechanical condition of C-TRAN vehicles
- Inspecting C-TRAN facilities after a disaster where necessary
- Responding to bus mechanical malfunctions

C-TRAN's Maintenance and Facilities departments support the agency in several safety aspects; C-TRAN uses the Transit Asset Management (TAM) policy statement to establish asset-related safety benchmarks. An asset meets the State of Good Repair (SGR) standards based on the following:

- The asset is in sufficient condition to operate at full performance.
- The asset can perform its manufactured design function.
- Using the asset in its current condition does not pose an identified, unacceptable safety risk or deny accessibility.
- The asset's life cycle investment needs have been met or recovered, including all scheduled maintenance, rehabilitation, and replacements under the Useful Life Benchmark(s) (ULB) as established in the TAM.

Day-to-Day Security

The Safety and Security Director manages C-TRAN's contracted Security Officers for day-to-day security needs and passenger fare compliance. The Safety and Security Department develops, implements, and updates all security and emergency response procedures, including but not limited to the following:



- Bomb threats
- Active threats
- Workplace violence
- Physical security
- Fare compliance
- Passenger Issues

C-TRAN is responsible for the security at transit centers, park and rides, bus stops, and facilities, and it maintains and updates a System Security Plan (SSP). The SSP addresses all aspects of transit security for the agency.

The C-TRAN Training Department provides training for all Operations employees and new Operator orientation and provides training periodically as necessary. Annually, the Maintenance Department provides safety training to their employees as needed. Additionally, C-TRAN routinely provides security-related information to employees via multiple communication formats and platforms.

C-TRAN maintains a passenger exclusion program, supported by C-TRAN Board Policy PBD 021, Transit Agency Rules of Conduct, and shares information with contracted C-TRAN security and local law enforcement when necessary. Additionally, the Washington Revised Code (RCW 9.91.025), Unlawful Bus Conduct, allows the agency additional lawful means to enforce security.

Threat and Vulnerability Assessment

The Threat and Vulnerability Assessment (TVA) evaluates the current passive and active security measures for multiple locations controlled and maintained by C-TRAN. The TVA includes general security measure recommendations to mitigate vulnerabilities. The TVA assesses the following:

- **Threats** – specific human-made actions that are potentially criminal and can adversely impact the organization.
- **Vulnerabilities** – gaps in the effectiveness of existing security measures to deter, prevent, or detect threats.
- **Consequences** – potential adverse impact on the organization.

Safety and Security Department

The Safety and Security Department coordinates, develops, and implements the PTASP, ASP, and the System Security Plan (SSP).



Contractors and Other Agency Agreements

Contractors and vendors doing business with C-TRAN must follow the concepts, policies, and procedures outlined in the PTASP and all other safety and security documents. Procurement documents include language identifying the PTASP and providing a framework for the vendor's and contractor's responsibilities. Upon request, C-TRAN makes available copies of all safety-related documents.

Interface with Internal and External Documents

The following C-TRAN documents, incorporated in the PTASP include the following:

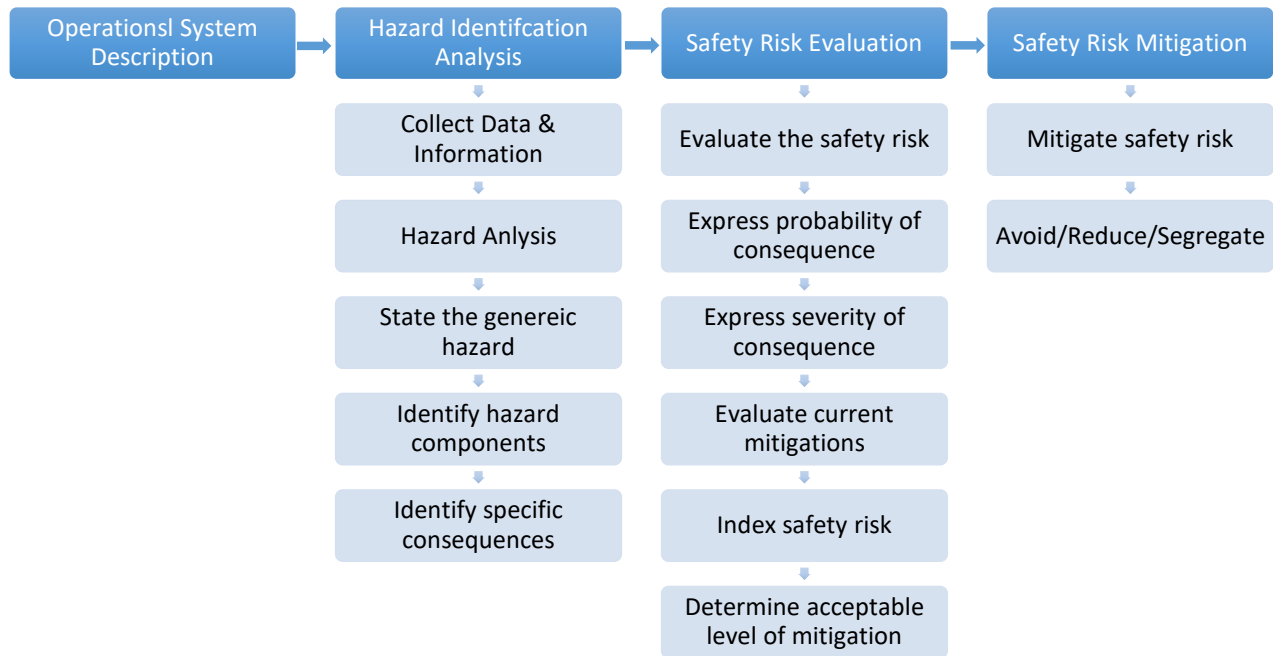
- Agency Safety Plan (ASP)
- Accident Prevention Program
- Employee Policy Handbook, including electronic copies on C-TRAN's intranet.
- Transit Asset Management Plan (TAM)
- Collective Bargaining Agreements
- Operator Training Manual
- Operator Handbook
- Job descriptions
- Job Hazard Analysis
- FTA Drug and Alcohol Policy
- Fuel
- Safety Data sheets (SDS)
- System Security Plan (SSP)
- Hazard Analysis Plan
- Maintenance Department General Safety Guidelines

Safety Risk Management

C-TRAN's Safety Risk Management (SRM) component includes the agency's processes, activities, and tools to identify, analyze, and mitigate hazards and residual risks. The flow chart below describes the process of SRM. The Safety Department operates as the central receiving hub of safety-related data. Additionally, it serves as a resource for agency departments as it pertains to the establishment of goals, benchmarks, and Performance Indicators (PI). The C-TRAN Safety Committee reviews and comments on C-TRAN's SRM as part of its annual document review.



Safety Risk Assessment



Hazard Identification and Analysis

Hazard identification and analysis are the first two steps in the Safety Risk Assessment process. C-TRAN uses this tool to identify and address hazards before they escalate into incidents or accidents. The following activities identify hazards:

- Hazard assessments
- Employee safety reporting
- System Improvement Requests (SIR)
- Electronic Asset Management (EAM) system reporting
- Customer service reporting
- Observations of operations and services
- Safety inspections
- Event reporting and investigation
- Event, injury, and illness history data
- Safety committee topics and points of discussion
- Legislation, industry standards, checklists, or external consultants
- Data trending reports are available through event reports, insurance carriers, and local authorities.

- Review and audit of safety policies, procedures, and safety instructions for equipment and materials
- Preventative Maintenance (PM) on rolling stock equipment
- Quality Assurance Program (QAP) rides performed by non-represented employees.
- Reports from external agencies

C-TRAN addresses the identified hazards as follows:

- Immediate resolution, if possible
- Reporting the hazard if an immediate resolution is not evident
- Reporting to the safety committee
- Mitigation and repair of the hazard
- Creation of a policy or procedure
- Training regarding new or revised policies and procedures

Job Hazard Analysis

A Job Hazard Analysis (JHA) outlines the high-risk work activities, the hazards and risks arising from work activities, and the measures to control the risks of the work activities. The JHA encourages teamwork, especially with new employees, and evaluates employee awareness. Employee training covers information provided in the JHA, and retraining occurs when an employee returns to work after a long absence.

The JHA focuses on:

- Job tasks
- Potential hazards associated with the job tasks
- The hazard control measures required to eliminate the risk of injury or reduce the risk to an acceptable level of risk

The JHA helps Supervisors and employees implement and monitor established control measures for safety in high-risk work activities. A JHA

- specifies work-related hazards and risks, and
- ensures readily accessible and easy-to-understand documents.

Workplace Chemicals

C-TRAN complies with the State of Washington's right-to-know laws and the state and federal Hazard Communication Standards. C-TRAN's Inventory Department keeps track of all chemical products and the Safety Data Sheets (SDS). The SDS is available for all chemicals through the online MSDS Database (www.msdsdatabase.com). The MSDS Database link is also included within the EAM system and is available to all C-TRAN employees. Employees must notify C-TRAN's inventory supervisor when having difficulty locating an SDS sheet. The inventory manager maintains C-TRAN's SDS database. Refer to C-TRAN Accident Prevention



Program document for detailed information on chemical inventory, training, physical hazards, and more.

All employees receive hazard communication training as part of C-TRAN's onboarding process, including how to read an SDS sheet. Employees in the Maintenance and Facilities Departments may work with industrial chemicals requiring additional training. C-TRAN provides ongoing training and further training as necessary.

Infectious Disease Exposure

C-TRAN monitors information from federal, state, and local government agencies regarding the spread of communicable diseases in C-TRAN's service area. C-TRAN commits to following the directives of these government agencies and reviews the recommendations for application to our service. In addition, C-TRAN provides the resources necessary to respond to a pandemic and educates employees and passengers on C-TRAN's response to a pandemic. C-TRAN's Safety and Security Director oversees the response and handles questions regarding C-TRAN's response. (The Accident Prevention Program specifically outlines COVID-19 requirements.)

Heat Exposure

Exposure of the human body to environmental and metabolic heat can cause heat-related illness, including heat rash, heat cramps, heat exhaustion, or heat stroke. All heat-related illnesses are preventable, and C-TRAN provides employees with the necessary communication regarding the symptoms and preventative measures to ensure their safety. Additionally, C-TRAN includes detailed heat-related exposure information and mitigation in the Transportation Service Disruption Plan and the Accident Prevention Program.

Extreme Cold Weather

The Pacific Northwest is a region unaccustomed to severe winter weather receiving a minimal amount of snow, ice, and cold temperatures; however, the region can see colder than normal temperatures requiring C-TRAN and its employees to prepare for these conditions. C-TRAN's Accident Prevention Program and Transportation Service Disruption Plan contain detailed information on ice and snow response.

Wildfire Smoke

Wildfire smoke contains particulate matter that can irritate the lungs, leading to coughing, wheezing, breathing difficulties, and other health problems. If wildfire smoke affects C-TRAN's service area, employees receive notification including mitigation of harmful pollutants. In addition to the communication methods used by C-TRAN, employees receive a Wildfire Handout explaining the health effects, sensitive groups, website communication, proper respirator use, training, and where to find the current air quality.



Bus-to-Person Collisions

C-TRAN uses several techniques to eliminate the risk of conflict between vulnerable roadway users and C-TRAN equipment.

All C-TRAN Operators receive training from the Training Department regarding pedestrian risk. C-TRAN Operators receive defensive driving and other safety techniques for working around visual obstructions in coaches, and include but are not limited to the following:

Mirror Station – During initial Operator Training, C-TRAN sets up a mirror station by placing orange cones in the vehicle’s blind spots and requires the trainees to sit in the driver seat, move around, and note the blind spots and how to avoid them.

Rock and Roll – C-TRAN’s Training Department teaches and requires Operators to use the ‘rock and roll’ technique when completing right and left turns. This technique trains the Operator to move around in their seat to see around visual obstructions on the bus like the A-pillar and the mirrors that can block vulnerable roadway users from view.

Squaring of Turns – C-TRAN trains Operators to ‘square their turns’ and turn the coach at a walking speed; this slows the vehicle as a turn is completed and gives the Operator more time to survey an intersection for vulnerable roadway users.

Employee Safety Reporting Program

The safety objective at C-TRAN cultivates and fosters a proactive safety culture encouraging employees to bring safety concerns forward. C-TRAN employees are the most familiar with the details of their job, and their input is crucial in monitoring and identifying safety issues and concerns. C-TRAN’s management staff encourages employees to report unsafe acts and conditions, such as a near miss, to a supervisor, manager, or safety committee member. After reviewing the information, C-TRAN takes remedial action when appropriate.

C-TRAN does not penalize employees for self-reporting safety issues; however, if a safety issue is not self-reported or C-TRAN receives the information from an outside source, and it involves an illegal act, is deliberate, or shows a willful disregard of promulgated regulations or procedures, C-TRAN follows Policy #108, Progressive Discipline.

Following are the reporting methods for C-TRAN employees:

- Report directly to their supervisors or managers (preferred)
- Report directly to the Safety and Security Director
- Report directly to a member of the safety committee
- Report directly to a union steward if a represented employee
- Report the concern in the EAM system for equipment or facilities
- Complete and submit a System Improvement Request (SIR)



- Submit the concern online through the customer comment portal on C-TRAN's website. A link to the comment portal is also included on the homepage of the EAM system.

A Supervisor or Manager reviews the employee's safety concerns, consults with the Safety and Security Director, and follows up as necessary.

Passenger Reporting

C-TRAN passengers are also partners in safety, and it encourages them to report safety concerns. Passengers can notify an Operator, customer service team member, or report safety concerns through the customer comment portal on C-TRAN's website. C-TRAN's contact information is on all buses, bus stop signs, and in the Rider's Digest. Additionally, C-TRAN's public-facing customer service offices at the Vancouver Mall and Mill Plain Transit Centers accept safety comments.

Customer Service Representatives forward passenger safety concerns to the appropriate Supervisor or Manager and enter the safety concern into the customer comment database. Operators report passenger concerns to Dispatch at the next safe stopping location or the conclusion of their shift. Employees immediately report events involving accidents or incidents to a supervisor.

SafeWatch

C-TRAN participates in the county-wide SafeWatch program with other local governmental agencies, such as Clark Public Utilities, Clark County, and the City of Vancouver. The



SafeWatch program acts as a safe house on wheels for public emergency assistance. Every C-TRAN bus, van, and vehicle displays the red SafeWatch logo, and employees have instant access to emergency help. The public is instructed to flag down the coach (waving both hands over the head) in a time of emergency. When

safe to do so, the Operator stops to assist. If stopping is unsafe, the Operator contacts Dispatch to request assistance. Operator training in the SafeWatch program includes observation of the incident to obtain a description of the suspect(s) or other pertinent information to provide to the first responders.

Observation of Operations and Maintenance

Below are C-TRAN's safety measures that help identify and monitor system safety.

Quality Assurance Program

C-TRAN requires all non-represented employees to ride a fixed-route or demand response bus at least once a month. The employees document their bus observations, including cleanliness and working customer components, through a survey. C-TRAN encourages

employees to report all safety-related concerns or issues. During high-risk situations, such as a pandemic, C-TRAN suspends the Quality Assurance Program until it is safe to resume.

Operations Supervisors

Supervisors assigned to the **Dispatch Center** monitor conditions of the transit system, including Operator fitness for duty, emergency response, weather, traffic, and roads. Supervisors gather information from firsthand reports or observations, governmental websites, news organizations, and the Clark Regional Emergency Services Agency (CRESA). The Operations Supervisors share critical information via the Intermodal Transport Control Systems (ITCS)/CAD-AVL, telephone, radio system, and other available means.

Field Supervisors routinely monitor transit operations and facilities for compliance and performance. Supervisors respond to situations to evaluate and assess conditions compromising the integrity of transit service and communicate their observations to Operators, Supervisors, Managers, Directors, and Chiefs as needed. Additionally, Supervisors respond and investigate accidents involving a C-TRAN vehicle and document their investigation in a report.

Security

C-TRAN contracts security through an outside company. Security Officers monitor transit centers, ride buses, conduct fare enforcement, and respond to significant incidents as requested by Operators or other C-TRAN personnel. The Security Supervisor provides the Safety and Security director or their designee the weekly Security Officer schedule and quarterly reports. The Safety and Security Director may also generate reports as needed. In addition, C-TRAN monitors transit facilities and bus routes to identify areas of increased problematic activity, adjusting security resources as necessary.

Video Surveillance

C-TRAN equips all revenue vehicles, the Vine platforms, C-TRAN facilities, and major transit centers with a video surveillance system. Supervisors and managers use captured video to address safety concerns but do not use it to monitor employee behavior. Additionally, C-TRAN often shares video clips with law enforcement upon request and must provide video through Public Records Request requirements.

Safety Inspections

Designated Safety Committee representatives perform safety inspections to do the following:

- Promote a safe and healthy work environment by providing a systematic and consistent inspection schedule to identify hazards, risks, and unsafe practices.



- Document unsafe practices by noting areas of concern.
 - Easily corrected practices are immediately fixed, and a notation of the corrective action is recorded.
 - Issues that are not easily corrected are noted and entered into the Electronic Asset Management (EAM) system to document and correct the issue.
- Acknowledge employees complying with safety policies and procedures with positive performance feedback.
- Ensure compliance with the TAM plan.

The Safety Committee representatives' complete monthly inspections of each work area and review the inspection report with facility-related entries documented in the EAM system. Additionally, staff conduct daily informal walkthroughs for safe work compliance.

Using a checklist, the Operators perform a pre-trip inspection of revenue vehicles before use. The Operator immediately reports to a Dispatcher the item(s) presenting a safety risk. If necessary, the Dispatcher contacts the Maintenance Department for response and assistance. A mechanic may perform minor mechanical repairs in the shop-assist area before the vehicle leaves the yard; however, unfixable repairs require entry into the EAM system, and the mechanic may take the vehicle out of service.

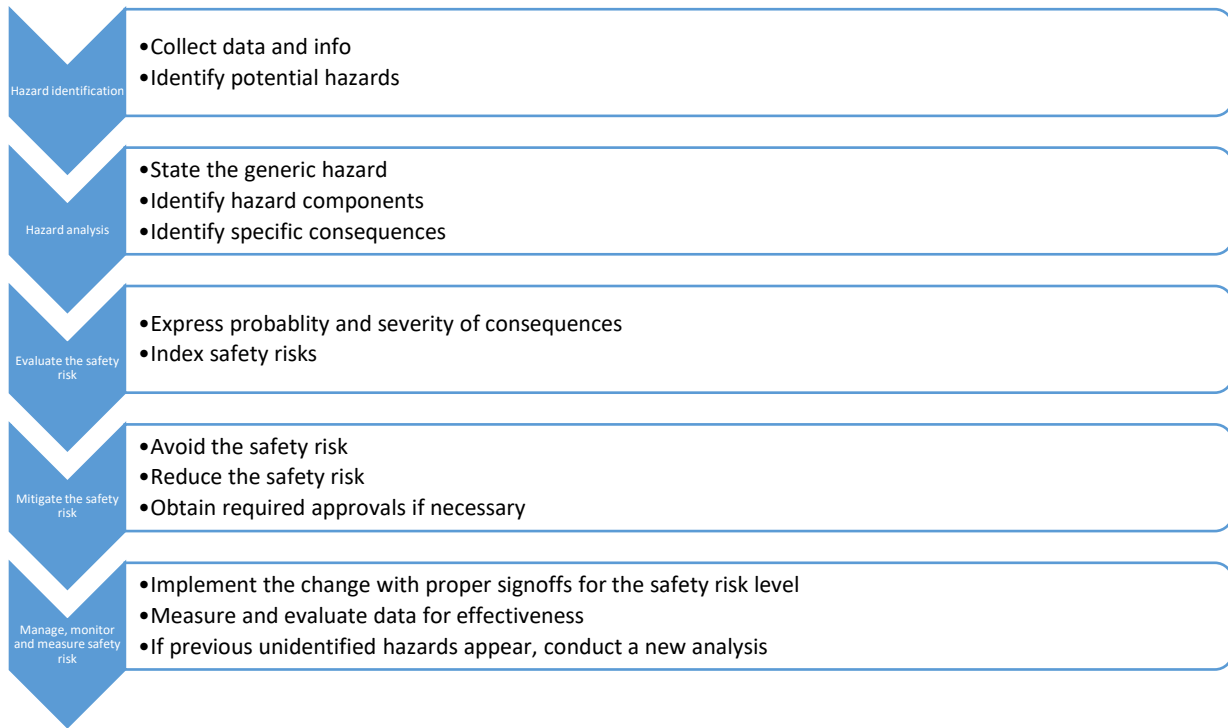
The Safety Committee Chair reports the results of the inspections at the monthly Safety Committee meetings.

As required by local codes and ordinances and by the National Fire Protection Agency (NFPA), a third-party contractor inspects C-TRAN's fire systems, such as fire alarms, fire detection units, fire sprinklers, and fire extinguishers. C-TRAN's Facilities Department maintains a copy of the inspection reports. All deficiencies identified during the inspection are remedied by C-TRAN personnel or a licensed contractor as soon as possible.

Hazard Analysis

A hazard is any actual or potential condition that may result in injury, illness, or even death. It can also lead to damage or loss of C-TRAN's facilities, equipment, rolling stock, or infrastructure, harm the environment, or hinder the ability to perform essential functions. Hazards pose a significant threat to the overall safety of the agency. To assess safety risks, the Hazard Analysis utilizes an SMS tool. Safety Risk is an evaluation that predicts the probability and severity of a hazard's consequences, considering the worst foreseeable yet credible scenario.





Use of the Hazard Analysis

C-TRAN uses hazard analysis to determine if agency changes or operational procedures may pose an additional risk(s). This process can be completed both formally through documentation and informally through discussion. Examples of change may include:

- The purchase of a new type of equipment
- The adoption of a new policy or procedure
- A change in a business practice
- A change in the configuration of existing equipment
- The adoption of a new service
- The removal of an existing service
- The detour of a route for an extended period

The Hazard Analysis evaluates the benefits and the consequences of one of the above changes. An evaluation looks at the potential safety risk severity and probability of the hazard associated with the change. Safety risk severity is the anticipated effects of a consequence, should it materialize, by referencing the worst foreseeable but credible condition. The evaluation assesses the severity of safety risk on the following:

- Illness or injury
- Damage to a bus or facility
- Operational compliance issues
- Monetary value of damage, fines, or loss of revenue



- Harm to the C-TRAN’s public image
- Potential for damage to the environment

Safety Risk Probability is the likelihood that the consequence might occur, considering the worst foreseeable and credible condition, and assigned a risk level using the decision tables below. The Safety Risk Severity Evaluation Table determines the appropriate personnel to receive the information, sign off on the change, and determine if mitigation is necessary to reduce the risk. Data from C-TRAN, and reliable data from other sources, such as NTD, American Bus Benchmarking Group (ABBG), and WSTIP, assist in the hazard assessment. The assessors consult with the Safety and Security Director as needed.

Hazard Evaluation

Hazards are rated in terms of the effect on employees, the public, and the transit system. The severity of the hazard is based on the expected level of injury, damage, and frequency of occurrence.

Severity categories are defined in the tables on the next few pages.

| Safety Risk Severity Evaluation Table | | |
|---------------------------------------|-------------------|---|
| Description | Severity Category | Mishap Result Criteria |
| Catastrophic | 1 | <ul style="list-style-type: none"> • Single fatality, total loss of a bus, or total loss of a facility requiring immediate action, including immediate termination of the hazardous activity or operation. • Operating conditions that may be caused by human error, the environment, design deficiencies, the elements, sub-systems or components failure, or procedural deficiencies. |
| Critical | 2 | <ul style="list-style-type: none"> • Multiple severe injuries requiring overnight hospitalization, *severe illness, or major system damage. • Operating conditions that may be caused by human error, the environment, design deficiencies, the elements, sub-systems or components failure, or procedural deficiencies. |
| Major | 3 | <ul style="list-style-type: none"> • Single severe injury requiring hospitalization, *illness, or major system damage. • Operating conditions that may be caused by human error, environment, design deficiencies, element, sub-system or component failure or procedural deficiencies. |
| Marginal | 4 | <ul style="list-style-type: none"> • Minor injury/injuries requiring treatment beyond first aid, *minor illness, or minor system damage. |



| Safety Risk Severity Evaluation Table | | |
|---------------------------------------|---|--|
| | | <ul style="list-style-type: none"> Operating conditions that may be caused by human error, environment, design deficiencies, sub-system or component failure or procedural deficiencies can be counteracted or controlled, or minor system damage |
| Negligible | 5 | <ul style="list-style-type: none"> No, or less than, minor *illness, minor injury, or minor system damage. Operating conditions that may be caused by personal error, the environment, design deficiencies, sub-system or component failure, or procedural deficiencies. |
| No Safety Implication | 6 | <ul style="list-style-type: none"> No injury, *illness, or system damage. Operating conditions that may be caused by personal error, environmental design deficiencies, sub-system or component failure, or procedural deficiencies. |

*Severity of illness determined by the Cumulative Illness Rating Scale



Hazards are also rated based on the expected likelihood:

| Safety Risk Likelihood | | | |
|-------------------------------|--------------|---|---|
| Description | Level | Specific Individual Item | Fleet or Inventory |
| Repetitive | A | Likely to occur often in the life of an item. | Continuously experienced. 4 times per month |
| Frequent | B | Will occur several times in the life of an item. | Will occur frequently. 1-3 times per month |
| Occasional | C | Likely to occur sometime in the life of an item. | Will occur several times. 2-11 times per year |
| Remote | D | Unlikely, but possible to occur in the life of an item. | Unlikely, but can reasonably be expected to occur. Once in more than two years. |
| Improbable | E | So unlikely, it can be assumed occurrence may not be experienced in the life of an item. | Unlikely to occur, but possible. Once in 2 to 10 years. |
| Extremely Improbable | F | Unlikely to occur. This level is used when potential hazards are identified and later eliminated. | Unlikely to occur. Once in Ten Years |

The combination of the two above tables establishes the Safety Risk Level ranked 1-5 in the table below.

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Safety Risk Level

| | Injury or Illness | Bus or Facility | Operational Compliance | Damage, Fine, Revenue Loss | Agency Image | Environmental Damage | Extremely Improbable (Once in 10 Years) (F) | Improbable (Once in 2-10 years) (E) | Remote (Once in <2 years) (D) | Occasional (2-11 times per year) (C) | Frequent (1-3 times per year) (B) | Repetitive (4+ times per year) (A) |
|---------------------------|--|--|---|---|-----------------------------------|---------------------------------|---|-------------------------------------|-------------------------------|--------------------------------------|-----------------------------------|------------------------------------|
| Catastrophic (1) | One or more fatalities | Total loss of bus or facility | Potential threat to operation | Damage, fines, or revenue loss >1M | Permanent impact on entire agency | Massive environmental effect | 4 | 4 | 5 | 5 | 5 | 5 |
| Critical (2) | Multiple overnight hospital admissions | Bus or facility out of service for more 30 days | Regulatory/agency policy and/or procedure deviation with a critical impact on safety. | Damage, fines, or revenue loss >1M-500K | Adverse impact on agency image | Critical environmental effect | 3 | 3 | 4 | 5 | 5 | 5 |
| Major (3) | Single overnight hospitalization | Bus or facility out of service for less than 30 days | Regulatory/Agency policy and/or procedure deviation with major reduction in safety margin | Damage, fines, or revenue loss >500K-100K | Major effect on agency image | Contained effect to environment | 2 | 2 | 3 | 3 | 4 | 4 |
| Minor (4) | Medical treatment beyond first aid | Bus able to operate, minor property damage | Regulatory/Agency policy and/or procedure deviation with minor safety implications | Damage, fines, or revenue loss >100K-30K | Minor effect on agency image | Minor environmental effect | 1 | 1 | 2 | 3 | 3 | 3 |
| Negligible (5) | First aid treatment | Minor damage to bus or negligible property damage | Regulatory/Agency policy and/or procedure deviation with limited safety implications | Damage, fines, revenue lost >30K | Negligible impact on agency image | Negligible environmental effect | 1 | 1 | 1 | 1 | 1 | 2 |
| No Safety Implication (6) | No safety implication | No safety implication | No safety implication | No safety implication | No safety implication | No safety implication | 0 | 0 | 0 | 0 | 0 | 0 |



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Safety Risk Assessment

As mentioned in this document, a hazard is a condition that can potentially cause harm. Risk Management is a systematic approach to managing workplace hazards. It is a critical component that identifies, evaluates, and determines how to reduce risks to an acceptable level to protect employees, visitors, third-party contractors, casual laborers, people who remain physically present at the workplace, and the environment. Risk management also protects assets and considers how to avoid losses.

After identifying hazard(s), and the potential impact of the hazard, C-TRAN’s management team conducts a Safety Risk Assessment using the Safety Risk Evaluation Table to determine the seriousness of the risk. Once they establish the risk severity, the following chart identifies the next steps regarding the operational impact, the personnel to notify, and the correct sign-off person to accept the risk. C-TRAN may conduct a Safety Risk Assessment using the safety risk register.

Safety Risk Evaluation Table

| Risk Level | Risk | Operational Impact | Minimum Action | Immediate Notification | Risk Acceptance & Mitigation Responsibility |
|------------|-------------------------------------|--|---|--|--|
| 5 | Extreme (Unacceptable) | Stop the operation | Mitigation to Level 4 or lower before operation | CEO, Chief of Staff, Safety Director, Department Chief | CEO, Chief of Staff, Department Chief |
| 4 | High (Unacceptable) | Operation permitted with execution of a high priority systemic mitigation strategy | Immediate mitigation and comprehensive mitigation. Level 3 minimum required | CEO, Chief of Staff, Safety Director, Department Chief | Department Chief, Department Director, Safety Director |
| 3 | Medium (acceptance with mitigation) | Operation permitted | Mitigation strategy required to reduce risk | Department Director or Manager, Safety Director | Affected Department Director & Manager |
| 2 | Low (Acceptance) | Operation permitted | Monitor, consider actions to reduce risk | Owner of process (Department Manager) | Manager over area of risk |
| 1 | Minimal (acceptance) | Operation permitted | N/A | Manager over area of risk | Manager over area of risk |
| 0 | None | Operation Permitted | N/A | N/A | N/A |



The evaluation results prioritize the risk and determine if the risk is appropriately managed or controlled. If the risks are acceptable, C-TRAN monitors the hazard. C-TRAN takes steps to lower the unacceptable risks to an acceptable or tolerable level, remove or avoid the hazard, or obtain the appropriate level of approval from management, as required in the above table; this is called Safety Risk Mitigation.

Safety Risk Mitigation

C-TRAN uses Safety Risk Mitigation (SRM) to control the likelihood or severity of the potential consequences of the hazard under evaluation. If the safety risk is unacceptable, management develops a new risk-control process to eliminate or mitigate the risk. After developing a new risk control process, management reassesses the process for unintended consequences using the SRM method, following the same procedure from the beginning of the analysis through the Safety Risk Evaluation. When mitigation of the remaining risk is at an acceptable level and satisfies management, they document and implement the new process.

C-TRAN employs many ways to resolve identified hazards, including design changes, controls or working device installation, and implementing special procedures. The order of precedence for resolving hazards follows:

- ***Design for Minimum Risk*** – eliminate hazards from the initial design or through design selection.
- ***Safety Devices*** – hazards that cannot be eliminated or controlled through design selection can be controlled to an acceptable level using fixed, automatic, or other protective safety design features or devices, with a periodic functional check.
- ***Warning Devices*** – when design or safety devices cannot effectively eliminate or control an identified hazard, warning devices may be used to detect the condition and generate a warning signal. The warning signal may provide enough information for a person to correct the hazard or provide time for evacuation. Warning signals and their applications minimize the probability of incorrect human reactions and are standardized with like systems.
- ***Procedures and Instructions*** – where it is impossible to eliminate or adequately control a hazard through design selection, engineering, or use of warning devices, procedures and training are used to control the hazard. Safety-critical tasks and activities may require certification.
- ***Stop the activity*** – C-TRAN can choose to not engage in a specific activity to eliminate the safety risk associated with it.

Management staff may accept and approve hazardous conditions that are not successfully mitigated to an appropriate level but follow the approval levels required by the SRET. The



Manager completing the Hazard Analysis obtains approval from the appropriate management level before continuing.

Contractors

Contractors working on transit property must comply with C-TRAN safety requirements. The safety of C-TRAN passengers, transit employees, contracted personnel, and the protection of transit property is essential.

The State of Washington does not address the responsibility for safety on multiemployer worksites. Responsibility is established through case law, WISHA Regional Directives, OSHA instruction documents, and Washington Department of Safety and Health inspectors. The contracting business must address any observed unsafe act up to and including work stoppage.

Before working on-site, all contractors agree to abide by all local, state, and federal safety regulations outlined in a contract with C-TRAN. Contractors submit site-specific safety plans before starting any on-site work. Additionally, contractors perform their work safely and do not pose a risk to themselves, C-TRAN employees, or the public. The Safety Department addresses with the Contractors all special safety issues, procedures, or conditions encountered while the contractor's employees work on-site. The pre-work safety process includes documenting safety expectations for C-TRAN to the contractor. The contractor safety plan includes but is not limited to the following items:

- General work rules
- Personal protective equipment
- Hazardous chemicals
- Emergency equipment
- Reporting injuries, illness, and incidents
- Material storage and movement
- Safe electrical work practices
- Personal hygiene and housekeeping
- Doorways
- Smoking
- Hot work permits
- Lockout/Tag-out
- Drug free workplace
- Other safety systems and components as applicable.



Safety Assurance

Safety Assurance evaluates the effectiveness of safety risk controls established under Safety Risk Management and the C-TRAN PTASP. The C-TRAN Safety and Security Department monitors and evaluates C-TRAN's operations system, including identification of emerging risks, compliance with regulatory requirements applicable to the PTASP, and meets or exceeds C-TRAN's safety objectives.

C-TRAN's safety assurance activities for supporting oversight and performance evaluation include but are not limited to the following:

- Safety inspection and surveillance surveys
- Internal and external audits
- Employee surveys
- Internal and external findings through observations of operations
- Safety Committee reviews
- TAM

Many actions used in Safety Assurance are the same actions used for hazard identification and analysis. C-TRAN requires a re-evaluation using the Safety Risk Management process for identified hazards or system weaknesses.

The figure here demonstrates the interaction of Safety Risk Management and Safety Assurance components in the PTASP structures.

Three subcomponents under Safety Assurance are

1. Safety Performance Monitoring and Measurement,
2. Management of Change, and
3. Continuous Improvement.

The following describes C-TRAN's processes and actions that take place under each subcomponent.

Safety Performance Monitoring and Measurement

The first step in Safety Assurance establishes the safety objectives and performance targets that meet C-TRAN's safety goals. Next, key performance Indicators (KPIs) indicate that C-TRAN is achieving the safety objectives, performance targets, and identifies areas of improvement.



Safety Goals, Objectives, and Performance Targets

C-TRAN uses the measurements below to track Safety Management System performance per 100k revenue miles for ABBG and NTD reporting:

- Revenue miles between major and minor maintenance events.
- Reportable safety events, including collisions, security events, preventable road collisions, unpreventable road collisions, and collisions on property.
- Reportable passenger, employee, and third-party injuries.
- Fatalities.

C-TRAN measures goals quarterly and compares the data from the previous two years when available. During the first year of the PTASP implementation, C-TRAN expects a 5% reduction in safety-related events, and it assesses each subsequent year to determine the percentage of reduction in all measurements.

C-TRAN expects the continuation of a 5% reduction in safety-related events in 2023 in the categories listed above. Changes in C-TRAN's operating environment during the COVID-19 pandemic (2020, 2021, and 2022) have made year-to-year comparisons difficult because of the significant changes in traffic levels, transit usage, and Operator and public behavior. Additionally, during this time, C-TRAN experienced the impact of the global shipping crisis, causing a shortage in the availability of parts; a labor shortage also impacted transit operations.

Quarterly, the Safety Director, Maintenance Director, Operations Director, and Business Intelligence Director meet to review the most recent data to determine if C-TRAN is progressing toward the 5% reduction goal.

Data Collection

The Human Resources, Safety and Security, Maintenance, and Operations departments work collaboratively to collect, analyze, and disseminate the necessary data to demonstrate the effectiveness of C-TRAN's operations system and the PTASP Plan. Additionally, the team discusses the safety-tracking sources outlined later in this document. It is important to note that C-TRAN may use other safety information data sources not included in this PTASP document.

Performance Indicators

The Safety department uses collected data to establish Performance Indicators (PI) and baselines for realistic safety performance targets. The Safety department also uses PIs to assess and communicate with affected departments.



Internal and External Audits

C-TRAN may do a safety review and audit to evaluate the overall effectiveness, efficiency, and reliability of a transit agency's PTASP. Additionally, C-TRAN's internal audit process prepares the agency for the FTA Triennial Review; however, audits do not replace regular safety inspections.

An audit determines compliance with C-TRAN's safety plan. Additionally, the audit facilitates and implements a corrective action plan based on audit findings. Following are C-TRAN's internal audit categories used formally and informally:

- Assess the effectiveness of the agency's system safety programs.
- Identify program deficiencies.
- Identify potential hazards in the operational system and weaknesses in the system safety programs.
- Verify that the prior corrective actions were tracked for closure.
- Recommend improvements to the system safety program.
- Provide management with an assessment of the status and adequacy of the system safety program.
- Continual evaluation of safety-related programs, issues, awareness, and reporting.
- Promote a clear understanding of success measures.
- Promote continuous improvement of the C-TRAN PTASP.

The Human Resources and Safety and Security Departments work collaboratively with all departments to develop and maintain annual internal audits.

Event and Incident Reporting and Investigation

Incident reporting and investigation identify causation, record relevant facts, prevent recurrence, and mitigate risk. A structured Root Cause Analysis (RCA) uncovers the underlying cause of safety-related events. The RCA repeatedly asks the "who, what, when, where, and why" questions to establish a root cause.

Event, Accident, or Incident

C-TRAN's Chargeable Accident Policy #308 provides the following definitions:

Accident includes an event involving any of the following: a loss of life; a report of an injury to a person (including an on-the-job injury); a collision of C-TRAN vehicle(s); a runaway coach; an evacuation for life safety reasons; or any agency vehicle leaving the roadway, at any location, at any time, whatever the cause.

Incident includes an event involving any of the following:



- A personal injury that is not a serious injury
- One or more injuries requiring medical transport
- Damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operation of the agency

Occurrence includes an event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of the agency.

Event includes any Accident, Incident, or Occurrence.

C-TRAN requires its employees to complete an Incident Report (IR) when an event occurs. Additionally, based on the type of event, accident, or incident, an employee may complete other documents or provide written documentation.

Reporting Policy and Procedure

All C-TRAN employees involved in an event notify a supervisor immediately and complete an IR within a specific period (refer to Policy 110 and Policy 308.) An event includes but is not limited to an accident or occurrence in a coach or staff vehicle, an on-the-job injury, or a serious or high-severity incident. When a supervisor or Manager instructs an employee to complete an IR, the employee must comply with the confines of the policies and directives of management staff.

Near-Miss & Minor Event Self-Reporting

C-TRAN does not classify near misses or minor events such as a self-reported red-light infraction as events but requires employees to report the incident to a supervisor. The self-report process allows Operators to confidentially report an event or a near-miss in a non-punitive environment (refer to Policy 308). In addition, self-reporting enables the Safety and Security Director to identify preventable root causes.

C-TRAN is currently working with other transit agencies across the state of Washington through WSTIP to beef up the near-miss reporting process and provide a universal method of documentation.

Processing Incident Reports

After the employee submits the IR, a clerical staff member enters the IR into the Risk and Safety Management software system. The Safety and Security Director reviews the document(s) for follow-up action as needed. C-TRAN reviews Incident Reports (IR) following the flow chart in below (the flowchart is subject to revision):



Operations



Maintenance



Administration



Incident, Injury, and Accident History

C-TRAN uses incident, injury, and accident statistics to monitor trends, identify risk areas, and measure the effectiveness of safety programs. C-TRAN tracks and maintains the incident, injury, and accident history in Risk and Safety Management software provided by C-TRAN's insurance agency. C-TRAN's Safety and Risk Department monitors incidents by type and identifies trends.

Practical Drift

Practical Drift means the slow and inconspicuous, yet steady, uncoupling between written procedures and actual workplace practices. Workplace practices that deviate from C-TRAN procedures develop over time, through experience, and often under the influence of specific workplace culture. These practices can be safe and unsafe and referred to as "the way we do



things around here.” Employees often execute these practices through peer pressure and habit; however, deviating from established procedures creates a safety risk for employees and C-TRAN riders.

C-TRAN frequently evaluates the effectiveness of the rules and procedures to establish and confirm safe work methods. Employees communicate with their supervisor if they feel pressure from coworkers to deviate from a procedure. If an employee witnesses another employee deviating from a procedure, the witnessing employee should advise their supervisor of what they observed.

When an employee witnesses or reports a procedural deviation, the supervisor informs and instructs the employee violating the proper procedure. Employees may use the Safety Risk Evaluation Table to evaluate the procedure and guide corrective action.

If C-TRAN identifies safety risks during the procurement process, it completes a hazard analysis, documents the changes, and provides training to the affected employees.

Operations Logs

The Operations Supervisors maintain a daily log documenting the significant events throughout the day. The dispatchers direct the employee to complete an IR if the event warrants. Completion of an IR typically occurs at the end of the Operator's shift or upon return to the yard. When necessary, the dispatcher orders the video from the bus. The Operations management team reviews the logs daily.

Management of Change

Unintended hazards result when processes or procedures change, such as external regulatory requirements or modifications within the service area. Additionally, internal changes may consist of new management staff, new equipment, or new procedures. Completing a hazard risk analysis mitigates the unintended consequences of a change and allows for the implementation of corrective action.

A process for change management considers the following:

- Criticality of systems and activities
- Stability of systems and operational environments
- Past performance

New equipment, system expansion, modification, and system rehabilitation, require design and procurement efforts. Design and procurement consider safety throughout the process. A hazard risk analysis of new equipment analyzes potential safety issues.



Continuous Improvement

Through the process of monitoring, measurement, and reassessing the safety risk controls, the data from this process identifies the areas of improvement and strengthens the systems.

Three general operational areas apply continuous improvement in the PTASP:

- Operational Safety Management, such as policies and procedures, infrastructure, and equipment
- Employee performance monitoring
- Control measures

C-TRAN uses the following best practices for continuous improvement in transportation safety management systems:

- Evidence of lessons learned incorporated into safety policy
- Agency benchmarks and the PTASP program performance compared to the rest of the transit industry
- Safety culture surveys
- Required contractor participation

Safety Promotion

Safety promotion is critical to the success of the PTASP by ensuring the entire organization understands and embraces the SMS, policies, procedures, and structure. Established safety culture recognizes the core value of safety, employee training in safety principles, and fosters open communication on safety issues. C-TRAN's organizational development training also provides employees with training in safety practices.

Employee Training

C-TRAN requires employee safety training and certification based on the below chart. Administrative workers (employees that do not drive a revenue vehicle and are not in the Maintenance Department) and all Operators attend Safety Orientation Part one and two. In addition, the Maintenance department staff attend Part One of the Safety Orientation and then receive tailored safety training associated with their job. Refer to the Accident Prevention program for detailed descriptions of the training topics listed in the chart.



| Training Title | All Administrative Workers | Coach Operators | Maintenance Managers | Lead Facility Maintenance Supervisors | Facility Maintenance Supervisors | Facility Maintenance Workers | Facility Service Workers | Lead Service Worker | Lead Mechanic | Diesel Mechanic | Mechanic Apprentice | Preventative Maintenance Apprentice | Coach Technician | Coach Technician | Inventory Technician | Inventory Supervisor | Inventory Analyst | Inventory Technician | Lead Vehicle Technician/Buyer | Vehicle Service Worker | Lead VSW-Janitor/Hostler | Lead Service Worker | Janitor/Hostler** | |
|---|----------------------------|-----------------|----------------------|---------------------------------------|----------------------------------|------------------------------|--------------------------|---------------------|---------------|-----------------|---------------------|-------------------------------------|------------------|------------------|----------------------|----------------------|-------------------|----------------------|-------------------------------|------------------------|--------------------------|---------------------|-------------------|---|
| Safety orientation Part 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Safety Orientation Part 2 | X | X | | | | | | | | | | | | | | | | | | | | | | |
| Bloodborne Pathogens | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Confined Spaces | | | | | X | X | X | | | | | | | | | | | | | | | | | |
| Fall Protection | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | |
| Flagger Certification | | | | X | X | X | | | | | | | | | | | | | | | | | | |
| Forklift and PIT Operation | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Globally Harmonized System | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Hearing Conservation | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Lockout/Tagout | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Chemicals | X | X | | | | | | | | | | | | | | | | | | | | | | |
| Pesticide Certification and Licensing | | | | | X | X | | | | | | | | | | | | | | | | | | |
| Personal Protection Equipment Use | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Respirator Use | | | | X | X | X | | | | | | | X | X | | | | | | | | | | |
| **Training simplified with Lead VSW-Janitor/Hostler Involvement | | | | | | | | | | | | | | | | | | | | | | | | |

Organizational Development

All employees undergo regular training to maintain compliance, refresh existing skills, and learn new skills. C-TRAN’s Organizational Development and Training Program provides formal and informal opportunities for employee growth. The program provides employees with information and essential resources to assist them in fulfilling all the requirements of their job. The program also helps the employee manage their career and professional development.

Two components of the Organizational Development program, job shadowing and cross-training, facilitate the transfer of knowledge and skills from seasoned professionals to those with less experience. C-TRAN leadership encourages and supports information sharing between employees at all levels. More specifically to the goals of the PTASP, these learning opportunities include information about accidents, causes of accidents, and how best to avoid them in the future. All employees routinely review and follow C-TRAN procedures, checklists, and publications.



Operator Training

C-TRAN provides new Operators with Commercial Driver's License (CDL) training. CDL testers document training and participate in a self-certification process Washington State oversees and audits. C-TRAN adapted its Early Learner Driver Training Program (ELDT) to accommodate the required changes established by the Federal Motor Carrier Safety Administration (FMCSA). As a result, C-TRAN certifies that each CDL test candidate meets the FMCSA and the Washington State Department of Licensing (DOL) requirements.

The Operator training programs are subject to internal auditing, including verifying the trainers' performance and program content. The audits assess the number of accidents involving new Operators and evaluate the effectiveness of Operator training.

Ride-checks provide a chance to correct behaviors before an accident occurs, and the reported incidents identify Operators needing a ride-check. Ride-checks evaluate an Operator's performance holistically and include an evaluation of the following:

- Health and wellbeing
- Customer service
- Safety
- De-escalation techniques
- Operation skills
- Ergonomics

C-TRAN currently conducts two annual four-hour sessions of training for fixed route Operators. Topics focus on safety compliance as regulatory agencies require, human resource-specific issues, and current event topics. C-TRAN also conducts four two-hour sessions for demand response Operators covering the same material as fixed-route with a paratransit focus; C-TRAN electronically documents Operator training.

Maintenance - Mechanical Certification and Training

C-TRAN encourages vehicle maintenance staff to obtain Automotive Service Excellence (ASE) certification in the Master Transit Bus Technician program. ASE Master Transit Bus Technician Certified employees receive a premium wage as listed in the C-TRAN/IAMAW labor agreement wage range tables; eligibility for the premium pay requires an employee to maintain the Master level certification. Vehicle Maintenance Employees receive training in Preventative Maintenance, Standard Operating Procedures (SOP), and applicable technical training.

C-TRAN provides compliance training for new-hire maintenance staff as required by the Washington Industrial Safety and Health Act (WISHA); employees receive refresher training in the spring. C-TRAN also provides additional training that covers human resource-specific



topics and other information based on current events. Maintenance employees also receive instructions on de-escalation. C-TRAN electronically documents all employee training.

Safety Committee

C-TRAN complies with the FTA, Title 49, § 5329 - Public transportation safety program, Safety Committee by the established parameters outlined in this section.

C-TRAN's Safety Committee meets monthly to discuss the previously identified safety-related topics and review the identified hazard analysis documentation. The committee consists of a 1:1 ratio of management and union-represented employees, and the committee maintains a 1:1 ratio. The union employees elect the represented employees from each significant department of C-TRAN (fixed-route, demand response, customer service, and Maintenance). The employee-elected members serve a one-year term with no current restriction on the number of terms. The committee focuses on the reported on-the-job injuries (OJI) issues and preventative measures to improve safety at C-TRAN. Additionally, C-TRAN posts Safety Committee Minutes on the safety bulletin boards at C-TRAN's various facilities for viewing by all employees.

Tasks assigned to the committee may include the following:

- Tracking and review of events
- Review of projects or purchases for safety-related issues
- Review of the methods to improve visibility on revenue vehicles
- Discussion on how C-TRAN can reduce the exposure of assaults on front-line employees

Safety Communication

In addition to the Safety Committees work to identify issues, evaluate safety performance, and take issues to senior management, they act as a front-line conduit for their coworkers to express safety concerns (refer to the Safety Committee section in this document and the Accident Prevention Program).

Below are other means C-TRAN uses to convey safety-related topics to employees.

Safety Bulletin Board

C-TRAN maintains Safety Bulletin Boards in the Operations, Maintenance, Administration building, and all transit center employee lounges. The bulletin boards display the required posters for employee review, the latest Safety Committee meeting minutes, and other safety-related information.



C-TRAN Internal Broadcast Network

Video monitors placed at Operations, Maintenance, Administration, 99th Street Transit Center, Vancouver Mall Transit Center, Fisher's Landing Transit Center, and Mill Plain Transit Center provide a visual of safety-related issues. The information includes brief safety updates, safety statistics, safety reminders, and other PTASP-related topics.

C-TRAN Intranet

C-TRAN's intranet provides the opportunity to disseminate information to all employees. Topics include safety-related articles, information, news, current events, and other safety topics.

Plan Review

The Safety & Security Department coordinates an annual review of the PTASP. Representatives from participating departments review relevant portions of the PTASP and provide feedback for updates and changes. Once the document completes the review process, C-TRAN's Safety Committee reviews the document and may add or make change or suggest further review. Once the Safety Committee completes its review, any changes that materially affect the PTASP or the operation of the PTASP go to the C-TRAN Board of Directors (Board) for consideration and signature by the Chief Executive Officer.

The C-TRAN Board of Directors approved the initial PTASP on October 13, 2020, and they receive minor updates to the Plan as needed. Board approval of more than minor revisions to the PTASP occurs as needed. Minor changes to the document do not require board approval.



Definitions

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| Accident | An event that involves a loss of life, serious injury, revenue vehicle collision, evacuation for life safety reasons. |
| Event | An accident, incident, or occurrence. |
| FTA | Federal Transit Administration |
| Hazard | Any real or potential condition that can cause injury, illness, or death; damage to or loss of facilities, equipment, rolling stock or infrastructure; or damage to the environment. |
| Incident | An event involving any of the following: A personal injury that is not serious; one or more injuries requiring medical transport; damage to facilities, equipment, rolling stock or infrastructure that disrupts operations. |
| Medical Treatment | Treatment by a physician or registered professional. Medical treatment does not include first-aid treatment even when provided by a physician or registered professional. |
| Occurrence | An event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt operations. |
| Performance Measure | An expression based on a quantifiable indicator or performance or condition that establishes targets and assesses progress toward meeting the established targets. |
| Performance Target | A quantifiable level of performance or condition, expressed as a value for the measure, to be achieved with the FTA's required time. |
| PTASP | Public Transportation Agency Safety Plan |
| Public Transportation Agency Safety Plan | A documented comprehensive agency safety plan as required by 49 U.S.C. 5329 . |
| Qualified Person (employee, manager, etc.) | A person who has successfully demonstrated the ability to solve problems relating to the subject matter, work, or project and include a recognized degree, certificate, or professional standing; or extensive knowledge, training, or experience. |
| Physical Hazard | A chemical classified as posing on of the following hazardous effects: explosive, flammable (gasses, aerosols, liquids, solids); oxidizer (liquid, solid, or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. |
| Risk | The composite of predicted severity and likelihood of the potential effect of a hazard. |



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| Risk Mitigation | Method(s) to eliminate or reduce the effects of hazards. |
| Safety Assurance | Processes to ensure the implementation and effectiveness of safety risk mitigation and ensures C-TRAN meets or exceeds its safety objectives through collection, analysis, and assessment. |
| Safety Data Sheet | Written, printed, or electronic information informing a person about the hazardous chemical, its hazards, and protective measures. |
| Safety Management Policy | C-TRAN's documented commitment to safety, which defines its safety objectives and the accountabilities and responsibilities of its employees. |
| Safety Management System (SMS) | A formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risk and hazards. |
| Safety performance Target | A performance target relating to safety management activities. |
| Safety Risk Assessment | The formal determination of Safety Risk Management priorities establishing the significance or value of safety risks. |
| Safety Risk Management | A process for identifying hazards and analyzing, assessing, and mitigating safety risk. |
| Serious Injury | An injury which: <ul style="list-style-type: none"> • Requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; • A fracture of any bone (except simple fractures of fingers, toes, or noses); • Sever hemorrhages, nerve, muscle, or tendon damage; • Involves any internal organ; or • Involves second or third-degree burns, or any burns affecting more than five percent of the body surface. |
| Smoking | A person who is lighting up, inhaling, exhaling, or carrying a lighted pipe, cigar, or cigarette of any kind. |
| State of Good Repair | The condition in which a capital asset is able to operate at full level performance. |



Acronyms

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| ABBG | American Bus Benchmarking Group |
| APP | Accident Prevention Plan |
| ASE | Automotive Service Excellence |
| ASP | Agency Safety Plan |
| CDL | Commercial Driver's License |
| CEO | Chief Executive Officer |
| COO | Chief Operating Officer |
| COOP | Continuity of Operations Plan |
| CRESA | Clark Regional Emergency Response Agency |
| DOL | Department of Licensing |
| EAM | Electronic Asset Management |
| ELDT | Early Learner Driver Training Program |
| FMCSA | Federal Motor Carrier Safety Administration |
| FTA | Federal Transit Administration |
| JHA | Job Hazard Analysis |
| NFPA | National Fire Protection Agency |
| NTD | National Transit Database |
| OJI | on-the-job injuries |
| PI | Performance Indicators |
| PM | Preventative Maintenance |
| PPE | Personal Protective Equipment |
| PTASP | Public Transportation Agency Safety Plan |
| QAP | Quality Assurance Program |
| SDS | Safety Data sheets |
| SIR | System Improvement Request |
| SO | Safety Officer |
| SOP | Standard Operating Procedure |
| SRM | Safety Risk Management |
| SSP | System Security Plan |
| TAM | Transit Asset Management |
| TEOC | Transit Emergency Operations Center |
| TSDP | Transportation Services Disruption Plan |
| TVA | Threat and Vulnerability Assessment |
| WISHA | The Washington State Department of Safety and Health |
| WSTIP | Washington State Transit Insurance Pool |

