



**2022**



## EXECUTIVE SUMMARY STATEMENT

South Metro Area Regional Transit (SMART) was organized with the mission of providing safe, reliable, and cost-effective transportation services to our customers. Safety and security are paramount to SMART, its employees, its vendors, its contractors, and to the customers it serves. Therefore, all SMART personnel, associated contractors, and vendors are responsible for promoting and ensuring the safety and security of all customers, employees, property, and the public through specific Safety Management Systems as outlined in this Public Transportation Agency Safety Plan.

All employees, vendors, and contractors of SMART are expected to accomplish their tasks safely, with the goal of always preventing, controlling, and minimizing undesired events, such as customer or employee injury, equipment or property damage, or degradation to system safety and security in any of the SMART transportation systems. Employees and our customers are SMART's most precious assets, and their safety and security are among SMART's greatest responsibilities. While the elimination of unsafe conditions and the prevention of accidents in SMART's transportation system and facilities are the responsibility of each employee, they are first and foremost the responsibility of SMART's leadership team. SMART's leadership team is responsible for developing programs to promote the safety and security of all employees and customers. SMART is fully committed to providing a safe and secure work environment, vehicles, systems, and facilities. The SMART leadership team will promote safety and security throughout the organization. The Transit Director, along with the management team, will be continually and directly involved in formulating, reviewing and revising safety and security policies, goals, and objectives. SMART's leadership team will provide the authority, support, and resources to establish and maintain high safety and security standards throughout the organization. To this end, the Transit Director approves the development, distribution, implementation, and administration of a comprehensive and integrated Public Transportation Agency Safety Plan.

Each SMART employee, vendor, and contractor is governed by the requirements and terms of these plans, and must conscientiously learn and follow prescribed safety and security rules and procedures. Each employee must operate safely, use equipment, tools and materials properly, and be trained in the work rules and procedures for his/her area of responsibility, including contingency plans for abnormal and emergency conditions. Each employee shall take an active part in the hazard identification and reporting process, as well as identifying and reporting suspicious packages, behavior, and other security threats. Management shall actively participate in a hazard/threat assessment and resolution process and shall receive the full cooperation and support of the Transit Director to prioritize safety and security.

The Public Transportation Agency Safety Plan is the governing document encompassing all of SMART's modes of transportation including: fixed-route, demand response, and non-revenue operations. The document identifies tasks and requirements to be applied at all levels of SMART's organization using specific Safety Management System practices.

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Dwight Brashear, Director/Accountable Executive

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Date

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# PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

## 1. SYSTEM DESCRIPTION/ORGANIZATIONAL STRUCTURE

### 1.1 Agency Information

South Metro Area Regional Transit (SMART) is owned and operated by the City of Wilsonville and is governed by Wilsonville City Council. The department is supported by a Wilsonville payroll tax and by State and Federal grant funding, including Federal Transit Administration (FTA) Section 5307, 5310, and 5339 funding.

### 1.2 Accountable Executive and Chief Safety Officer

Accountable Executive: Dwight Brashear, Director

Chief Safety Officer: Eric Loomis, Operations Manager

### 1.3 SMART and Fleet Services Facilities

Administrative Office and Fleet Services  
28879 Boberg Road  
Wilsonville, OR 97070

These facilities serve as dispatching points for bus service, management offices, and vehicle maintenance.

City of Wilsonville's Fleet Services maintains all SMART vehicles, equipment, and facilities and performs routine maintenance in accordance with manufacturers' manuals, codes, standards, and established procedures. The overall philosophy is to maintain a level of readiness that will ensure safe, efficient, and reliable public transit for the City of Wilsonville.

#### 1.3.1 Scope of Service

The current revenue service characteristics are as follows:

Monday through Friday	5:00 a.m. to 11:30 p.m.
Saturday	8:30 a.m. to 6:00 p.m.

#### 1.3.2 Fleet

SMART operates 33 active buses as of December 2019. The number of buses in SMART's fleet is determined by the projected annual bus schedule requirements with additional spares, to account for buses in maintenance and inspection, or awaiting repair. The average age of the active bus fleet was seven (7) years as of December 2019. SMART buses are 100% accessible for the elderly and persons with disabilities.

#### 1.3.3 SMART Safety Capabilities

- On-board video recorders and cameras
- Fire extinguishers
- Window emergency exit latches

- Fire suppression/CNG warning system
- Brake/door interlock system
- Emergency entrance and exit door releases
- Parking lots and transit center facilities with security lighting

## 2. PLAN DEVELOPMENT, APPROVAL, AND UPDATES

### 2.1 Purpose for Public Transportation Agency Safety Plan (PTASP)

The purpose of the PTASP is to set forth the requirements for identifying, evaluating, and minimizing safety risks throughout all elements of SMART including the relationships and responsibilities with city departments and other organizations and agencies which affect transit system safety. The PTASP is the blueprint for SMART’s efforts in strengthening its overall safety management and its goal of continuous improvement in safety performance using Safety Management Systems (SMS) methods.

<b>Approval by Safety Committee</b>	<b>Safety Committee</b>	<b>Date of Approval</b>
	<b>Approved Unanimously</b>	<b>December 7, 2022</b>
<b>Signature by the Accountable Executive</b>	_____	<b>Date of Signature</b>
	<b>Dwight Brashear, Transit Director</b>	
<b>Approval by the Board of Directors or an Equivalent Authority</b>	<b>Wilsonville City Council</b>	
	_____	<b>Date of Signature</b>
<b>Wilsonville City Council and Mayor</b>	<b>Julie Fitzgerald, Mayor</b>	
<b>Certification of Compliance</b>	<b>Oregon Department of Transportation</b>	<b>Date of Certification</b>
	_____	_____
	<b>Representative</b>	<b>Signature</b>

### 2.2 Annual Review

The PTASP is reviewed annually to:

- Evaluate all safety tasks for appropriateness as SMART improves and expands;
- Refine and improve the current task descriptions and activities;
- Identify new tasks which may be required as SMART expands; and
- Identify the organization(s) responsible for accomplishing the newly-added safety-related tasks.

## 2.3 Control and Update Procedures

The PTASP analysis, review, revision, and publication process is the responsibility of the Chief Safety Officer (CSO). The Transit Director is responsible for the control and update of the PTASP. Input for these annual reviews is solicited from all SMART managers, the Assistant City Manager, City Manager, the agency safety committee, and other regulatory agencies. SMART will evaluate the Plan in October of each year.

### 2.3.1 Safety Committee

The safety committee will be convened by a joint labor-management process which will consist of an equal number of management representatives and frontline employee representatives, selected by the labor organization representing the plurality of the frontline workforce employed by the City of Wilsonville.

The safety committee, followed by city council will approve the agency safety plan and any updates to the agency safety plan annually.

In general, the committee will meet monthly, but at least quarterly. Committee members will serve two-year terms to maintain a stable process in reviewing safety data, creating performance targets, and plan approval.

The safety committee will be made up of eight members. Four representatives will be from the City and four representatives, who meet the criteria above, will be chosen by SEIU.

The safety committee will have responsibilities in identifying and recommending risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the agency's risk assessment. The committee will identify mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended. The committee will also identify safety deficiencies for purposes of continuous improvement.

The safety committee will establish performance targets for the risk reduction program 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 (NTD). Based on NTD data, the committee will work to reduce vehicular and pedestrian accidents involving buses that includes measures to reduce visibility impairments for bus operators that contribute to accidents, including retrofits to buses in revenue service and specifications for future procurements that reduce visibility impairments. The committee will also work to mitigate assaults on transit workers, including the deployment of assault mitigation infrastructure and technology on buses, including barriers to restrict the unwanted entry of individuals and objects into the workstations of bus operators when a risk analysis performed by the safety committee determines that such barriers or other measures would reduce assaults on transit workers and injuries to transit workers.



## 2.4 Implementation

The Transit Director has specific responsibilities for the management, oversight, and delegation of: system safety, hazard management, occupational safety and health, accident and incident investigation, oversight of construction safety, safety and security certification, environmental management, safety training, and for monitoring the effectiveness (internal safety review) of the implementation of the PTASP.

The Transit Director has delegated CSO with the day-to-day operational leadership of the department and responsibility for establishing and implementing policies, procedures, and programs to ensure that SMART is effectively implementing its responsibilities under the PTASP. The Transit Director has delegated the CSO to collaboratively implement employee safety, industrial safety, and occupational safety training aspects of the PTASP. The Transit Director has delegated to the CSO the responsibility of overseeing all related aspects of the PTASP including the bus operations, bus maintenance, and safety programs for pedestrians and bicyclists.

## 3. SAFETY PERFORMANCE TARGETS

Annual Safety Performance Targets							
<i>Based on the safety performance measures established under the National Public Transportation Safety Plan.</i>							
<i>Based on FY 2021 NTD Report Period</i>							
Mode of Service	Fatalities (total)	Fatalities (per 100k VRM)	Injuries (total)	Injuries (per 100k VRM)	Safety Events (total)	Safety Events (per 100k VRM)	System Reliability (failures/ 100k VRM)
<b>FIXED ROUTE/DEVIATED FIXED ROUTE</b>	0	0	0	0	14	2.4	4.4
<b>DEMAND RESPONSE/ ADA PARATRANSIT</b>	0	0	0	0	3	5.8	11.7

Safety Performance Target Coordination		
Coordination with the State and Metropolitan Planning Organization (MPO) in the selection of State and MPO safety performance targets.		
<b>SMART coordinates with Oregon Department of Transportation (ODOT) and Metro, Portland's MPO, to establish and maintain safety performance targets.</b>		
Targets Transmitted to the State	State Entity Name	Date Targets Transmitted
	ODOT	January 2023
Targets Transmitted to the Metropolitan Planning Organization(s)	Metropolitan Planning Organization Name	Date Targets Transmitted
	Metro	January 2023

#### 4. SAFETY MANAGEMENT POLICY STATEMENT

South Metro Area Regional Transit (SMART) is committed to providing safe, secure, clean, reliable, and efficient transportation services to its patrons. This policy statement serves to express management's commitment to and involvement in providing and maintaining a safe and secure transit system using Safety Management Systems (SMS) as its foundation. In the interest of safety and security, SMART has developed and adopted this Public Transit Agency Safety Plan (PTASP and also referred to as 'the Plan'). The Plan is intended to document all policies, functions, responsibilities, etc., of the agency necessary to achieve a high degree of system safety and applies to all areas of the transportation system, including procurement, administration, operations, maintenance, etc.

SMART management is responsible for maintaining a coordinated safety system in order to identify and prevent unsafe acts and conditions that present a potential danger or threat to public safety. Management has responsibility for maintaining and implementing the Plan and complying with the policies, procedures, and standards included in this document. All departments, personnel, and contract service operators are charged with the responsibility of adhering to this Plan. Any violation of safety and security practices is subject to appropriate administrative action. Management is ultimately responsible for enforcing the Plan, ensuring resources are available to sustain the Plan and maintaining a safe and secure system.

The goals of the Plan are to ensure the safety and security of SMART customers, employees, first responders to incidents, the public, equipment, and infrastructure throughout the life of the system.

Plan objectives are to define safety-related activities, management controls, and to plan and establish a process for monitoring and ensuring safety in accordance with SMART's Mission Statement and values.

The purpose of these goals and objectives is to minimize the exposure of the public, personnel, and SMART property to hazards and unsafe conditions; and to ensure that no single point of failure of a system or equipment results in an unsafe condition. These goals and objectives are reflected in the planning, design, construction, operation, and maintenance of the system. The goals and objectives are accomplished through the performance of the following functions:

- Safety, fire protection, and emergency management considerations are incorporated into all design and specification development and design reviews for the system;
- Hazards associated with SMART's system are identified, assessed, and then eliminated or minimized to attain an acceptable level of risk;
- A safety culture is instilled throughout SMART that emphasizes preventive measures over corrective measures to eliminate unsafe conditions;
- All managers, supervisors, and employees comply with Federal and State OSHA Standards, local codes, and environmental regulations.

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Dwight Brashear, Accountable Executive

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Date

## 4.1 Policy Communication

### 4.1.1 Safety Policy Communication

This PTASP is updated on an annual basis, but modifications may happen at any time during the year. If a change is made to the Plan, SMART notifies all staff through daily communication methods, posted memos, and daily posted notifications. Depending on the significance of the change, immediate training may take place or incorporated into the annual training curriculum.

### 4.1.2 State and MPO Communication

SMART annually shares safety performance targets with the local Metropolitan Planning Organization, Portland Metro Council, and Oregon Department of Transportation to assist with their planning activities. SMART makes every effort to coordinate with these two agencies to the extent possible.

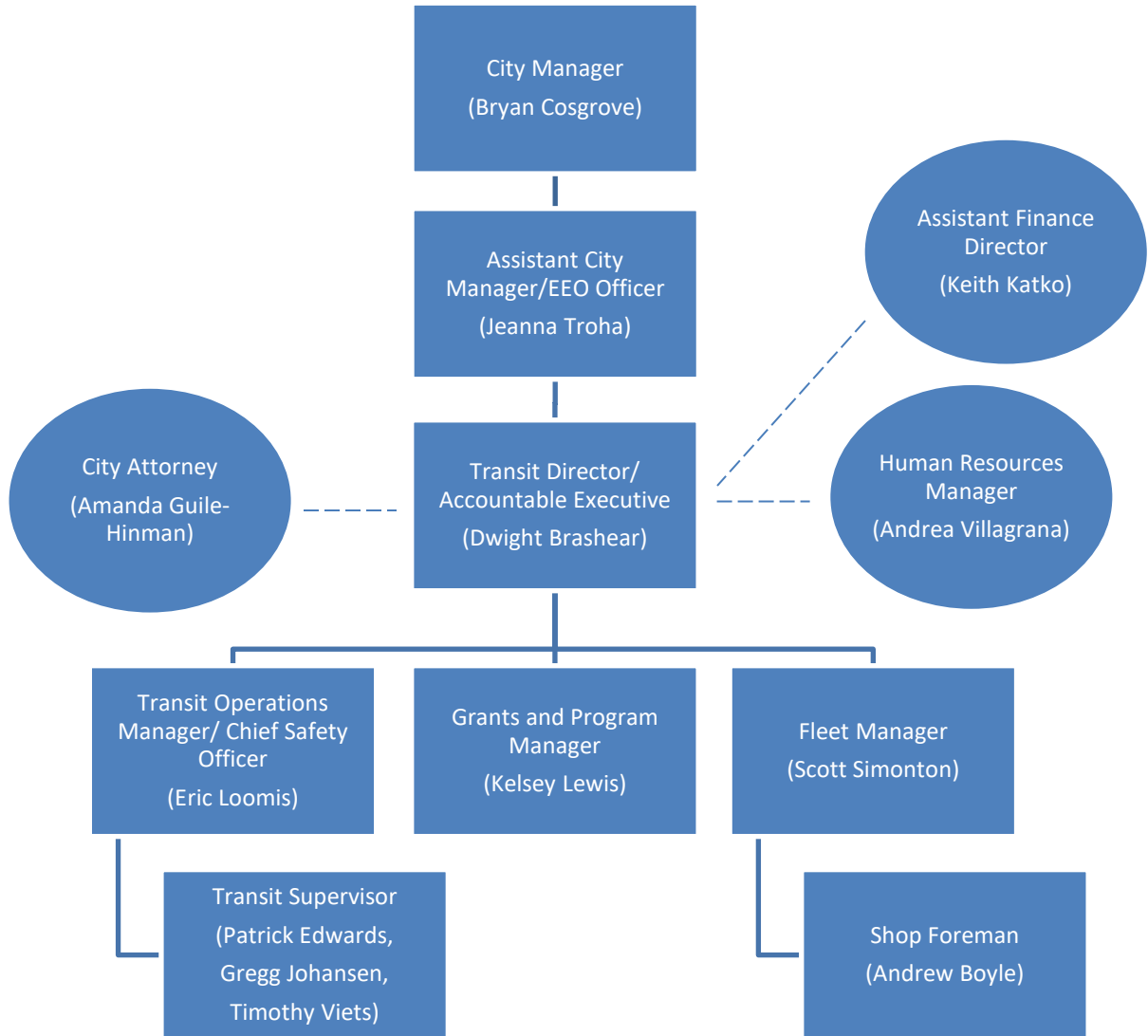
Safety and Security of the Oregon Public Transportation Plan (OPTP) aligns with the key components of the Federal Transit Administration's Safety Management System (SMS) principles in the Public Transportation Safety Action Plans. Goal 6 of the OPTP and SMS principles extend safety and security beyond vehicles and stations and include transit personnel, riders and the surrounding community. Safety is a basic expectation of all public transportation users and providers. Both the OPTP Goal 6 policies and strategies and the SMS principles encourage greater safety of the public transportation system through a range of strategies that proactively address design factors, personnel training, use of safety technologies, accident investigation and emergency management planning. The OPTP Goal 6 policies and strategies and SMS principles are scalable and effective across a broad range of organizations and applications. The goal of the OPTP and SMS is to ensure the agency has an inclusive and effective process to direct resources to optimally manage safety.

### 4.1.3 Employee Safety Reporting Program

As written throughout this Plan, SMART requires all employees to notify their supervisor of any hazard or safety condition they observe and deem to be a threat to staff, customers, or the general public. Each observation is considered credible unless through assessment and investigation it is found not to be a risk. Employees are encouraged to report unsafe conditions to their immediate supervisor but also may report directly to the CSO.

SMART ensures all employees protection from retaliation by superiors as a result of a safety observation or hazard identification.

#### 4.1.4 Organizational Chart



## 4.2 Staffing

### 4.2.1 Transit Director/Accountable Executive

#### **Dwight Brashear**

The Transit Director plans, coordinates, directs, and supervises public transportation system operations and fleet maintenance. Responsibilities include long-range planning and goal-setting within the department; implementation of department strategies and Transit Master Plan; and recommending and implementing SMART policies. The Transit Director manages the budgetary aspects of the Transit department.

#### 4.2.2 Transit Operations Manager/Chief Safety Officer (CSO)

##### **Eric Loomis**

The Transit Operations Manager leads daily operations of bus services. The Transit Operations Manager is designated as the CSO and ensures SMS oversight. All transit drivers, dispatchers, and supervisors report to this position. The Operations Manager is responsible for developing and implementing an ongoing training program. Other responsibilities include the development and implementation of new routes and services, maintaining departmental records, and administering approved projects.

#### 4.2.3 Grants and Programs Manager

##### **Kelsey Lewis**

The Grants and Programs Manager is responsible for the daily activities associated with SMART's active transportation programs. The Grants and Programs Manager is responsible for ensuring the Transportation Demand Management (TDM) program is administered efficiently and effectively. Other responsibilities include developing and administering measurable programs to diverse target audiences, implementing public information campaigns, and submitting grants and statistical reporting. Grant administration includes oversight of Federal and State formula and discretionary funding.

#### 4.2.4 Fleet Services Manager

##### **Scott Simonton**

The Fleet Services Manager leads and supervises the operation of the Fleet Services Division. The Fleet Services Division is responsible for the maintenance and repair of the city's inventory of vehicles and equipment, fuel management, and the acquisition and disposal of vehicles/equipment. The Fleet Services Manager schedules and coordinates the city's preventive maintenance program, maintains records and reports on equipment, and develops strategies related to the operation of the division's goals, personnel allocation, budget, and operations.

## **5. HAZARD IDENTIFICATION/RESOLUTION PROCESS**

The Hazard Identification/Resolution Process is perhaps the heart of the PTASP.

### **5.1 Hazard Identification**

The management of identified hazards is a vital component of the SMART PTASP. Accidents and incidents are prevented by proactively identifying hazards, assessing the associated risk, developing appropriate mitigating measures, and tracking implementation of the corrective action to closure. SMART identifies hazards via several different internal and external sources and categorizes each identified hazard accordingly to the severity and likelihood of the hazard.

The PTASP applies to all SMART employees and obligates everyone to be constantly vigilant for identifying hazards. It covers all aspects of SMART's facilities, systems,

equipment, vehicles, right-of-way, and work environments. SMART defines a hazard as a condition or set of conditions, internal or external to the system or system operation, which, when activated could cause injury or death or damage to or loss of equipment or property. An unacceptable hazard is a condition that may endanger human life or property or result in major system loss. This condition must be mitigated.

## 5.2 Hazard Management Process

The Hazard Management Process:

- Defines SMART's approach to hazard management and the implementation of an integrated system-wide hazard resolution process;
- Specifies the sources of and the mechanisms to support the ongoing identification of hazards;
- Defines the process by which identified hazards will be evaluated and prioritized for elimination or control; and
- Identifies the mechanism used to track and resolve the identified hazard(s).

## 5.3 Hazard Identification

Identification of hazards is the responsibility of all departments and individual employees; continuous management of hazards is the key to an effective PTASP. Hazards that are identified are analyzed by the CSO in collaboration with the Transit Director, Fleet Services Manager, and other city departments that the hazard might be relevant to for severity, frequency, and cost feasibility of remedial action required to eliminate, reduce, or control the hazard.

Hazards can be identified through a number of sources:

- System inspections, reviews, regulatory inspections, and observations
- Accidents and incidents investigations
- System reliability and failure reports
- City safety inspections
- Ride checks and proficiency checks
- Customer complaints
- Employee safety concerns or issues reported to management

## 5.4 Hazard Analysis

SMART uses two methods for orderly identification of hazards: inductive and deductive analysis.

The inductive hazard identification process consists of an analysis of system components to identify their respective failure modes and the effects they will have on the total system. This process assumes the failure of single elements or events and, through analysis, determines the potential consequential effects on the system or subsystem.

The deductive hazard identification process (post-accident/incident) involves defining an undesired effect (e.g., collision, fire) and then deducing the possible conditions or system component faults that are necessary to cause the undesired effect.

### 5.5 Hazard Categorization

Hazard severity is a subjective determination of the worst case that could be anticipated to result from human error, design inadequacies, component failure, or malfunction. The categories of hazards based on the MIL-STD-882-C are as follows:

**Category 1, Catastrophic** – operating conditions are such that human error, design deficiencies, element, subsystem or component failure, or procedural deficiencies may cause death or major system loss and require immediate termination of the unsafe activity or operation.

**Category 2, Critical** – operating conditions are such that human error, subsystem or component failure or procedural deficiencies may cause severe injury, severe occupational illness, or major system damage and require immediate corrective action.

**Category 3, Marginal** – operating conditions are such that they may result in minor injury, occupational illness, or system damage and are such that human error, subsystem, or component failures can be counteracted or controlled.

**Category 4, Negligible** – operating conditions are such that human error, subsystem or component failure, or procedural deficiencies will result in less than minor injury, occupational illness, or system damage. The categorization of hazards is consistent with risk-based criteria for severity; it reflects the principle that not all hazards pose an equal amount of risk to personal safety.

### 5.6 Hazard Probability

Hazard Probability is defined as the probability that a specific hazard will occur during the planned life expectancy of the system element, subsystem, or component. It can be described subjectively in potential occurrences per unit of time, events, population, items, or activity, ranked as follows:

A (Frequent)	Likely to occur frequently (individual); continuously experienced (fleet/inventory)
B (Probable)	Will occur several times in life of an item; will occur frequently in fleet/inventory
C (Occasional)	Likely to occur sometime in the life of an item; will occur several times in fleet/inventory
D (Remote)	Unlikely but possible to occur in life of an item; unlikely but can be expected to occur in fleet/inventory

E (Improbable)

So unlikely, it can be assumed occurrence may not be experienced; unlikely to occur, but possible in fleet

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

1A, 1B, 1C, 2A, 2B  
3A



**Unacceptable**

1D, 2C, 2D, 3B, 3C



**Undesirable with management decision required**

1E, 2E, 3D, 3E, 4A,  
4B



**Acceptable with review by management**

4C, 4D, 4E



**Acceptable without review**

**Unacceptable:** The hazard must be mitigated in the most expedient manner possible before normal service may resume. Interim corrective action may be required to mitigate the hazard to an acceptable level while the permanent resolution is in development.

**Undesirable with management decision required:** A hazard at this level of risk must be mitigated by the Transit Director.

**Acceptable with review by management:** The CSO must determine if the hazard is adequately controlled or mitigated as is and report his/her assessment to the Transit Director.



Acceptable without review: The hazard will be reviewed by the CSO but does not require further mitigation or control.

The Risk Assessment Process is used to prioritize hazardous conditions and focus available resources on the most serious hazards requiring resolution.

## 5.7 Hazard Resolution

Resolution of hazards will utilize the results of the risk assessment process. The objectives of the hazard resolution process are to:

1. Identify areas where hazard resolution requires a change in the system design, installation of safety devices, or development of special procedures;
2. Verify that hazards involving interfaces between two or more systems have been resolved; and
3. Verify that the resolution of a hazard in one system does not create a new hazard in another system.

SMART will use the following methodologies to assure that PTASP objectives are implemented throughout design, construction, and procurement; and operations and hazards are eliminated or controlled:

1. Design out or design to minimize hazard severity. To the extent permitted by cost and practicality, identified hazards will be eliminated or controlled by the design of equipment, systems, and facilities.
2. Hazards that cannot reasonably be eliminated or controlled through design will be controlled to the extent practicable to an acceptable level through the use of fixed, automatic, or other protective safety design features or devices. Provision will be made for periodic functional checks of safety devices and training for employees to ensure that PTASP objectives are met.
3. When design and safety devices cannot reasonably nor effectively eliminate or control an identified hazard, safety warning devices will be used (to the extent practicable) to alert persons to the hazard.
4. Where it is impossible to reasonably eliminate or adequately control a hazard through design or the use of safety and warning devices, procedures and training will be used to control the hazard. Precautionary notation will be standardized and safety-critical issues will require training and certification of personnel.

## 5.8 Hazard Resolution Management and Tracking

Resolution of identified hazards will be monitored and managed by the CSO, in collaboration with the responsible department, and approved by the Transit Director. The Operational Hazard Reporting Form and Hazard Tracking Matrix will be used for tracking identified hazards and the hazard resolution process. See Appendix A and B. This process allows the CSO to follow-up on mitigation strategies to determine if an alternative strategy would be more effective.

## **6. SAFETY ASSURANCE: ACCIDENT/INCIDENT REPORTING & INVESTIGATION**

SMART has a training program to promote safety and, to the extent possible, avoid accidents and incidents. In the event of an accident or incident, SMART has policies and procedures in place to handle any situation effectively and efficiently.

### **6.1 Procedures**

Immediately following an accident/incident the situation is to be reported to the appropriate immediate supervisor. All accidents and incidents are investigated. The degree of formality during the process of accident/incident investigation is directly dependent upon its severity in accordance with the Operations Policies and Procedures Manual. Supervisors investigate all bus accidents and will conduct and record them according to the procedures.

Basic information about the reportable accident/incident must be transmitted verbally and/or via email to the Transit Operations Manager. If necessary, everyone involved in the incident/accident will complete the proper post-accident/incident forms to be submitted to the Accident Review Board and other entities. If required, the Accident Review Board will receive all pertinent information from the accident and determine type of accident (preventable/non-preventable), conduct a root cause analysis and recommend retraining exercises.

## **7. FACILITIES INSPECTIONS (Includes Systems Equipment & Rolling Stock)**

Safety Inspections of SMART facilities occur quarterly by the City's Safety Committee using a safety checklist to detect and correct unsafe conditions and deteriorating equipment conditions to ensure the safety for employees, public safety, and to ensure compliance with regulations.

Buses are inspected on a daily basis by operators to identify defective safety equipment. Bus operators perform pre-trip and post-trip inspections and submit forms to report defective safety equipment at the conclusion of their shifts and buses are not returned to service until such items are repaired.

Transit facilities are inspected regularly by City Public Works Department in compliance with FTA guidelines.

Bus stops are inspected regularly by Fleet Services to ensure equipment condition, accessibility for pedestrians, and cleanliness.

## **8. MAINTENANCE REVIEWS/INSPECTIONS (All Systems & Facilities)**

Section 1 describes the major equipment and facilities of the system along with the department responsible for performing facility and equipment maintenance. Each responsible department maintains its maintenance and inspection manuals for each facility and all equipment. Preventive Maintenance Inspections (PMs) for vehicles are performed in accordance with manufacturer requirements by Fleet Services. Checklists are used to perform the PMs to ensure thorough and consistent inspections.

### **8.1 Resolution of Review/Inspection Findings**

Serious hazardous conditions that are identified during the above inspections are immediately corrected and the conditions are documented in accordance with the SMART's procedures and practices. In the event a hazard cannot be immediately corrected, it shall be reported to the CSO and is managed and resolved in accordance with Section 5.2, Hazard Management Process. The CSO then tracks the resolution to closure including evaluating effectiveness of mitigation strategy.

## **9. RULES/PROCEDURES REVIEW**

Standard operating procedures and safety rules, which are incorporated into the SMART Operations Employee Manual and Operations Policies and Procedures Manual, provide for safe operations of SMART vehicles off and on SMART property. SMART's policies and procedures establish processes for development, revision, maintenance, management, and enforcement of SMART's operations. The Transit Supervisors review this process to ensure consistency and the integrity of the policies and procedures modification process. These revisions are made on an as-needed basis and reviewed annually. The Operations Manager is charged with ensuring policies and procedures are developed, written, communicated, and consistently followed. SMART's Operations Policies and Procedures Manual is reviewed annually and revised as necessary. Procedures can be implemented with review of the Transit Operations Manager and/or the Transit Director.

### **9.1 Process for Ensuring Rules Compliance**

Operators are tested on their knowledge of the Operations Employee Manual and Operations Policies and Procedures Manual during initial training and annual trainings.

- Policy/Procedure Prioritization – evaluate which activities pose greatest risk of injury, service disruption, or customer dissatisfaction.
- Roles and Responsibilities – identify who shall be responsible for each specific situation.

Safety training is completed by new employees and annually for all employees. All employee training includes classroom and field certification.

Supervisors are required to ensure that employees perform their assigned duties in compliance with all policies and procedures. Tailored training is assigned to employees who

are not in compliance with policies and procedures. Disciplinary procedures consistent with union contracts may be used to enforce compliance with established rules and procedures.

Documentation is required from management to maintain accurate compliance records. Records shall be kept both on observations and on action taken to correct observed deficiencies.

## **10. SAFETY PROMOTION: TRAINING AND CERTIFICATION REVIEW**

Instruction in safe methods of operation and safety procedures is included in manuals, handbooks, and other documentation developed for the training and certification of operations and maintenance personnel. Training systems have been developed by each department, which include in-house classroom training, on-the-job training, and testing. Each department is responsible for establishing safety training requirements specific to personnel job descriptions and tasks. The City maintains central records of safety training for all employees. Management reviews training records annually to ensure that the required trainings and certifications are being completed by employees and are up-to-date.

### **10.1 New Employee Orientation**

All new employees and all employees who receive a promotion must attend mandatory safety training (depending on job assignment) including: City Handbook, Operations Employee Manual, Operations Policies and Procedures Manual, Bloodborne Pathogens training, and other department-specific hazard and safety trainings. All employees receive PTASP training, which includes hazard management and basic hazard communication.

### **10.2 Hazardous Materials/Hazard Communication Training**

All maintenance and support personnel who are required to use chemicals and hazardous or toxic substances are trained in the safe use of such substances. Employees who move to new positions are provided training in the use of any new chemicals that they may be assigned to use by the Fleet Manager.

### **10.4 Safety Related Operations and Maintenance Training**

All new bus operators are provided training, which includes traffic regulations, rules, procedures, and field training. Bus operators must obtain a commercial driver license (CDL). Supervisors perform ride-checks to assess knowledge of bus operations, regulations, procedures, and pre-trip inspections. Operations employees attend a quarterly safety meeting to review and train on focused safety topics.

Fleet employees are required to attend a monthly safety training to review industry best practices. This interactive training uses video and other training materials to test an employee's knowledge of that month's safety topic.

## 10.5 Safety Rules and Procedures Training

Employees are trained to perform in accordance with the safety rules and procedures applicable to their department. The rules and procedures for each department are established by the appropriate manager and coordinated with the CSO. Violations of rules, regulations, and/or procedures may result in disciplinary action (coaching, retraining, reprimands, suspensions, or dismissal) in accordance with the rule books, policies, and the union contract.

## 10.6 Emergency Preparedness Training

Employees are provided training in: System Security, SOPs regarding hazardous materials, bomb threats and unknown substance response incidents, and emergency preparedness for employees as part of New Employee Orientation, technical training, and ongoing training programs.

# 11. EMERGENCY MANAGEMENT

## 11.1 Responsibilities for Emergency Management

SMART focuses on the preparedness, response, recovery, and mitigation of incidents and safety events that impact SMART transit operations. Effective emergency management minimizes impacts to transit operations.

Emergency preparedness comes in many forms: providing transit fire/life safety and emergency management training to SMART employees, revising emergency plans, ensuring policies and procedures work in concert with emergency management practices, frequent public outreach, presentations to SMART employees, equipment testing and maintenance, and community involvement.

## 11.2 Emergency Plans and Procedures

City management is responsible for the development and management of emergency plans that are included in policies and procedures and given out during new employee training.

Bus emergencies, which endanger life, health, property, or revenue service, require response in accordance with SMART policy. Modifications to existing policies and procedures, or new policies and procedures can be developed, distributed for review, requesting concurrence and approval from all parties involved. The new or modified policy or procedure is incorporated into the SMART Operations Policies and Procedures Manual or Employee Handbook and given to all employees.

# 12. SYSTEM MODIFICATION REVIEW/APPROVAL PROCESS

Safety assurance of new systems, equipment, and vehicles begins with the basic design and in the development of specifications to ensure that safety requirements and standards are incorporated. Consideration is given to such items as system interfaces, human factors,

environmental conditions, isolation of energy sources, materials compatibility, use and long-term storage of critical materials, emergency response capability, including emergency egress and rescue paths, fire sources and measures for protection, equipment layout, lighting requirements, and maintenance requirements. The individual(s) responsible for reviewing the system modification depends on the type of new system or equipment being implemented and could consist of, but is not limited to: Transit Operations Manager, Fleet Services Manager, Transit Director, Community Development Department, and contractors. The Transit Director will be a part of the final approval process with those involved in the system modification.

### **13. SAFETY DATA ACQUISITION/ANALYSIS**

The following are sources of data that SMART utilizes to collect data and identify hazards for entry into the Hazard Management Process:

- Reports and observations from operators and other field personnel
- Information, experiences, and ideas from operators, maintenance, and management
- Observations of facilities and operations hazards by administrative personnel
- Results from emergency response to accidents and incidents
- Formal hazard analyses using the inductive process
- Inspections of facilities and equipment to identify and document safety, environmental, and industrial hygiene hazards on a proactive basis
- The Fleet Services Manager oversees preventive maintenance and performs periodic inspections and reviews in accordance with established procedures described in Section 8
- Safety-related comments received by dispatchers and supervisors from the customers and the general public are forwarded to the CSO for evaluation and follow-up action
- The CSO generally develops the required reports to provide safety management information to the rest of the department

#### **13.1 Access to Data - Reports Prepared by CSO or City Safety Committee**

The City and/or SMART produces and distributes the following reports to communicate safety information to all levels of the organization:

Internally-Distributed Reports

- Bus Accidents
- Reports of employee injuries
- Safety Performance Reports
- Hazard Management Log

### **14. INTERDEPARTMENTAL/INTERAGENCY COORDINATION**

All safety-sensitive issues that pertain to operators are reported to transit supervisors. Transit supervisors will assess the severity of each issue and determine what actions to

follow. When appropriate, transit supervisors will communicate with the Transit Operations Manager/CSO, Transit Director, Human Resources Manager, and other departments and agencies associated with the situation.

All safety-sensitive issues that pertain to maintenance are reported to the Fleet Services Manager, who will communicate with the appropriate departments and agencies as needed.

SMART will keep an ongoing close relationship with City of Wilsonville Police Department and Clackamas County Sheriff's Department understanding that safety is a priority at SMART and that coordination of the departments creates a safer community with quicker response time. SMART periodically involves the Police Department and Fire District at All Staff meetings to train employees in safety and security awareness.

## **15. HAZARDOUS MATERIALS PROGRAMS**

SMART is responsible for developing procedures that ensure compliance with the standards by all SMART employees. The chemical, hazardous material, and Safety Data Sheet (SDS) review process is incorporated into the SMART's training manuals for relevant employees. Access to the approved SDS is available in Fleet Services.

## **16. DRUG AND ALCOHOL ABUSE PROGRAMS**

The SMART Human Resources department is responsible for administering a Substance Abuse Testing Program in accordance with 49 CFR Part 40 and 49 CFR Part 655. The Human Resources department monitors the program and ensures that employees in safety-sensitive positions who are returning to work from the Employee Assistance Program (EAP) have been medically certified to do so. The major goal of the Substance Abuse Policy is to ensure a safe operating environment for the public and employees. A major purpose of the EAP is to refer employees to the appropriate medical and/or rehabilitation treatment and counseling. The objective is to help them resolve their substance abuse problems and return to their full productive job capacity.

## **17. CONTRACTOR SAFETY COORDINATION**

All contractors who perform work on, or interface with the operating systems are required by contract to ensure that supervisors and assigned employees attend safety training.

Each contract also requires compliance with applicable Federal and State OSHA regulations. Contractors must submit to the City of Wilsonville and/or SMART required safety training certifications and documentation of course completion that are pertinent to the work to be performed under the contract. The City of Wilsonville reviews the certifications and documentation for validity and to ensure currency of the training.

## **18. ALTERNATIVE FUELS & SAFETY**

SMART's fleet operates on diesel, gasoline, compressed natural gas (CNG), and electricity. The fleet is composed of the following fuel types: Diesel, 21.25%; compressed natural gas (CNG) 21.25%; Clean Diesel 12.5%; Diesel Hybrid, 6%; Battery Electric 6%; and gasoline 33%.

SMART will maintain and conduct safety training for relevant employees in regards to the use and maintenance of all vehicles and facilities for the different fuel types.

## **19. OPERATING ENVIRONMENT AND PASSENGER FACILITY MANAGEMENT**

SMART strives to provide convenient, safe, and reliable transportation services to its customers. Operators only let passenger alight at dedicated stop locations in normal driving situations.

Fleet Services and Public Works are in charge of maintaining bus stops and passenger facilities owned by SMART.

### **19.1 Current Bus Stops**

Each stop is assessed for needed amenities and accessibility. Stops that lack street lighting will be prioritized for receiving lighting. Stops that do not meet ADA requirements, such as proper curb cuts, will be prioritized to become compliant. At high passenger volume stops, shelters and benches are considered if they are currently lacking and are prioritized based on need.

### **19.2 Future Bus Stops**

Elements that are considered prior to locating future bus stops include:

- On-street vs. dedicated stop locations
- Transferability between other bus routes and other modes of transportation
- Passenger security
- Type of amenities (seating, design, lighting, etc.)
- Information kiosks, poles, signs, etc.
- Standards for improvements and upgrades at stops
- ADA related items (curb cuts, access)
- Routine maintenance (graffiti removal, cleaning)
- Curbing (trash removal, storm water drainage)
- Area lighting
- Traffic engineering/ergonomics for bus stop placement
- On-site security provisions



## **20. SECURITY**

SMART has incorporated security into the design of its facilities. Cameras are used for surveillance in some areas. Fleet Services and the SMART management offices are attached to the yard where buses are parked and maintained. The yard is enclosed with chain link fence and is only entered using a key FOB or through the SMART offices.

Employees are trained to understand their role in security, which is outlined in the Transit Operator Handbook. All employees are trained on how to identify hazards and what steps to take for a given situation. Training sessions are continually conducted to help refresh employees on system security and how to minimize threats and vulnerabilities.

## **21. INTERNAL SAFETY REVIEW PROCESS**

The CSO, in collaboration with the management team, is responsible for monitoring the effectiveness of the implementation of the PTASP.

### **21.1 Scope of Activities**

All SMART safety activities and programs are subject to planned, periodic, and regularly scheduled safety review throughout the life of each system. The safety and security review procedures and checklists evaluate the effectiveness of the implementation of requirements of the PTASP.

SMART will perform comprehensive and continuous internal safety review of its operations at least once every three years. Over a three-year period, all requirements of the PTASP must be reviewed at least once. The three-year schedule shall be reviewed and updated as necessary annually by the first of October. A copy of the schedule shall be given to each department for review.

Safety reviews will be scheduled by the CSO and conducted by the department manager.

Each internal safety review will be conducted in accordance with a set of safety review checklists prepared by the department manager before the safety review is begun. The checklists will also be developed in accordance with the PTASP and this procedure.

### **21.2 Safety Review Reporting**

The department managers will provide the safety review checklists and any additional reports to the CSO and the Transit Director.

The internal safety review process is intended to be complete and comprehensive. The CSO is responsible for ensuring that all requirements of the PTASP are reviewed in each three-year cycle and each element is comprehensively evaluated.

In addition to SMART's approved PTASP, the department managers shall use Standard Operating Procedures (SOPs), other pertinent documents, and the principles of system safety and security as a basis for preparing a set of safety checklists before beginning the on-site review. Some typical examples of these procedures and other pertinent documents reviewed during the safety reviews include:

- System operating rule book (SMART Operations Employee Manual and Operations Policies and Procedures Manual);
- Training curricula and materials;
- System design criteria and project engineering procedures for extensions and modifications;
- Records and documentation of safety related events, tasks, processes, procedures, activities and policies;
- Previous internal and external safety and security review reports;
- Corrective action plans; and
- All other documentation needed to verify safety-related activities, programs and policies.

**Appendix A**  
**Operational Hazard Analysis (OHA)**

<b>OPERATING HAZARD ANALYSIS</b>						
<b>System:</b>		<b>Prepared by:</b>			<b>Date:</b>	
<b>Subsystem:</b>		<b>Reviewed by:</b>			<b>Date:</b>	
<b>OHA No:</b>		<b>Approved by:</b>			<b>Date:</b>	
<b>General Description</b>		<b>Hazard Cause/Effect</b>		<b>Hazard Assessment Matrix</b>	<b>Corrective Action</b>	
<b>Task Description</b>	<b>Hazard Description</b>	<b>Potential Cause</b>	<b>Effect on Personnel/Subsystem/System</b>		<b>Possible Controlling Measures and Remarks</b>	<b>Resolution</b>

**Appendix B Hazard Tracking Matrix**

<b>Hazard Tracking Matrix</b>							
No.	Description	Date Identified	Source (Origin of Hazard)	Assessment Results	Recommendations (Proposed Resolution)	Status (Resolution verification)	Date Closed