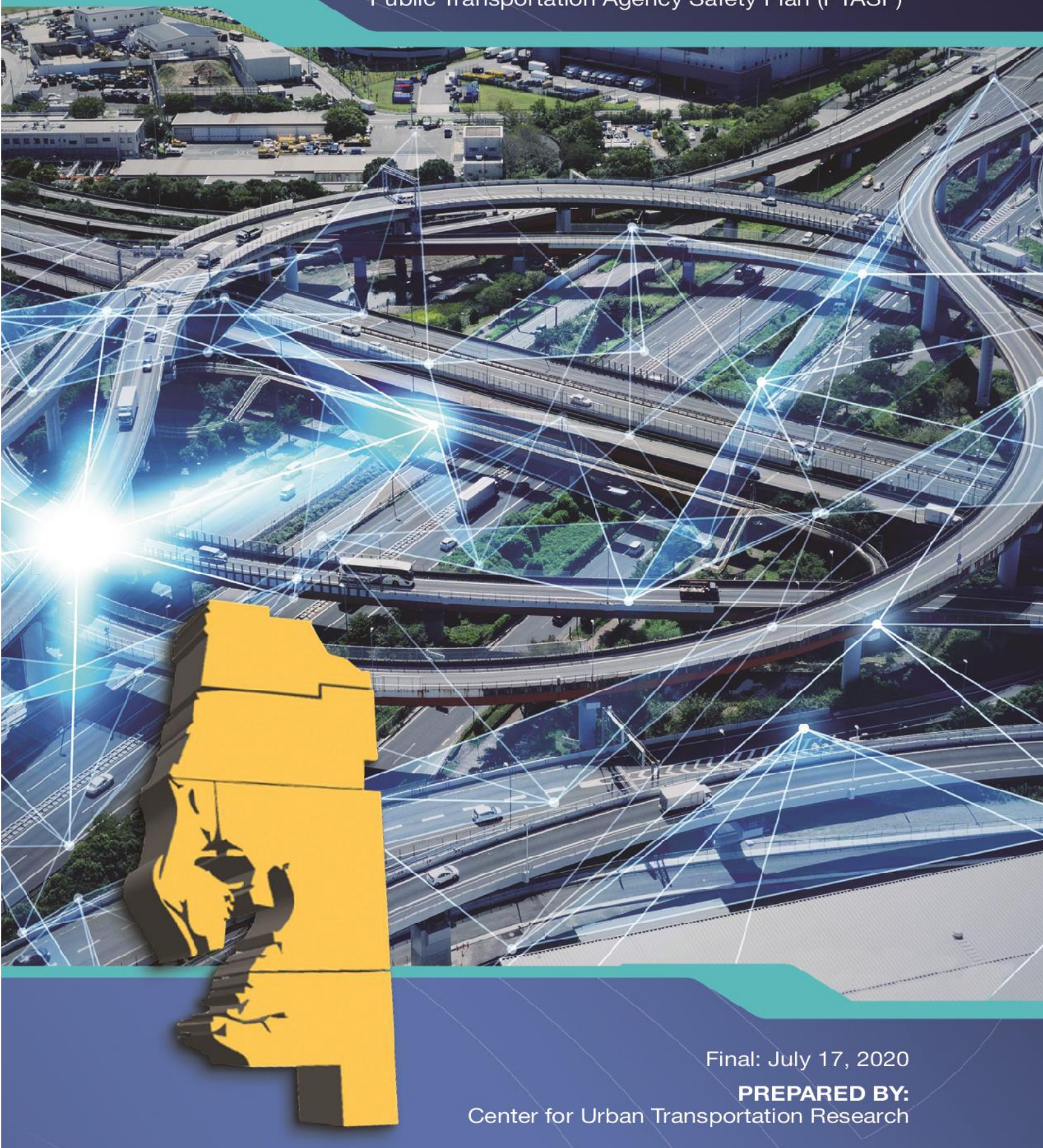
TBARTA

Tampa Bay Area Regional Transit Authority

Public Transportation Agency Safety Plan (PTASP)



Final: July 17, 2020

PREPARED BY:
Center for Urban Transportation Research

Final Rule 49 CFR Part 673

The Public Transportation Agency Safety Plan (PTASP) final rule (49 C.F.R. Part 673) requires certain operators of public transportation systems that are recipients or sub-recipients of FTA grant funds to develop safety plans that include the processes and procedures necessary for implementing Safety Management Systems (SMS). The rule requires that safety plan include the processes and procedures for implementing SMS.

"Safety is a core organizational function that focuses on management of safety risk through all aspects of TBARTA business."

Under 49 C.F.R. Part 673, a transit agency is required to maintain documentation describing its Safety Plan, including documentation of the implementation and results of processes and procedures. Existing documentation that describes processes, procedures, and other information required in Part 673 are referenced in this Safety Plan by the applicable document name and its location within the appropriate sections of the plan.

This document has been prepared by the Center for Urban Transportation Research at the University of South Florida to meet the requirements of this final rule.

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Section 1 – Transit Agency Information

Overview

The Tampa Bay Area Regional Transit Authority (TBARTA) works to advance regional transportation needs in Hernando, Hillsborough, Manatee, Pasco and Pinellas counties. TBARTA's purpose is to plan, develop, fund, implement, and operate a regional transit system in this area. TBARTA's vision is a world-class transit system that connects and moves the Tampa Bay region.

TBARTA is also required to produce a regional transit development plan (RTDP), integrating the transit development plans of participant counties, with priority assigned to regionally significant transit projects and facilities. Adopted June 22, 2020, this plan is called Envision 2030.

Goals

- Develop and maintain a regional transit development plan
- Develop, implement, and operate a sustainable and efficient regional transit system
- Identify and secure sustainable funding sources to support a regional transit system

Commuter Services

Vanpool

TBARTA's Commute Tampa Bay program assists commuters who live or work in the Tampa Bay region by working with them directly and/or partnering with their employers to find a better way to get to work other than driving by themselves, including carpool, vanpool, telework, bikepool, walking, and public transit. Currently TBARTA contracts with Enterprise Leasing Company of Florida, LLC for its vanpool services. The terms "contractor" or "the contractor" are used interchangeably in this document and are intended to refer to the current contractor.

Vanpool Facts and Advantages

- A vanpool consists of a group of 5 to 15 commuters who regularly travel to and from work in a leased vehicle.
- Vanpoolers average between 24 and 54 miles each way to and from work.
- This public-private partnership is operated in conjunction with a contractor (currently Enterprise Leasing Company of Florida, LLC), which provides vehicles, insurance, maintenance, repair, billing and support for all vanpool groups.
- TBARTA provides a set monthly subsidy to the vanpool program to help offset costs and provide a financial incentive for commuters to participate.
- The fee paid by the riders is based on the distance to work, number of people in the vanpool, gasoline and tolls.
- As part of vanpool participation, commuters can also sign-up for the Emergency Ride Home program (ERH). ERH assures that commuters will not be stranded at work in case of an

emergency, providing reimbursement for up to six rides home from work each year that meet the Emergency Ride Home guidelines.

Transit

Public transit is key to connecting people and places, and TBARTA is proud to partner with local transit providers. Together, TBARTA supports regional transit agencies that operate nearly 500 buses, service more than 9,000 transit stops, and provide rides to nearly 28 million passengers each year in the greater Tampa Bay region.

Transit Agency Name	Tampa Bay Area Regional Transit Authority			
Transit Agency Address	5100 Lemon Street, Ste 209, Tampa, FL 33609			
Name and Title of Accountable Executive	David Green, Executive Director			
Name of Chief Safety Officer or SMS Executive	Cyndi Raskin			
Mode(s) of Service Covered by This Plan	Vanpool via contractor		**List All FTA Funding Types (e.g., 5307, 5310, 5311)**	5307
Mode(s) of Service Provided by the Transit Agency (Directly operated or contracted service)	Vanpool via contractor			
Does the agency provide transit services on behalf of another transit agency or entity?	Yes ☐	No ☒	**Description of Arrangement(s)**	
Name and Address of Transit Agency(ies) or Entity(ies) for Which Service Is Provided	N/A			

Section 2 – Plan Development, Approval, and Updates

The following section provides information on the approval process for the plan development. This section also documents the annual review of the plan and tracks all updates that are made as a result of annual reviews or periodic changes made to the plan to improve safety.

Section 2.1 – Plan Approval

Name of Entity That Drafted This Plan	Center for Urban Transportation Research (CUTR) for TBARTA	
Signature by the Accountable Executive	Signature of Accountable Executive	Date of Signature
		7/17/2020
Approval by the Board of Directors or an Equivalent Authority	Name of Individual/Entity That Approved This Plan	Date of Approval
	Tampa Bay Area Regional Transit Authority Governing Board	7/17/2020
	Relevant Documentation (title and location)	
	Tampa Bay Area Regional Transit Authority (TBARTA)	
Certification of Compliance	Name of Individual/Entity That Certified This Plan	Date of Certification
	David Green	7/17/2020
	Relevant Documentation (title and location)	
	Executive Director	

Section 2.2 – Version Management

A record of the complete history of successive versions of the plan shall be maintained in Table 1.

Table 1. TBARTA PTASP Version Management Table

Version Number and Updates			
Version No.	**Section/Pages Affected**	**Reason for Change**	**Date Issued**
1	Original	Original Safety Management System (SMS) Plan	7/17/2020

Section 2.3 – Annual Review and Update of the Public Transit Agency Safety Plan

By June of each year, the Executive Director (acting as the PTASP Accountable Executive), the Director of Commuter Services (acting as the Chief Safety Officer), the Principal Planner, and the Executive Assistant will conduct a review of the plan. All necessary revisions will be made. The Governing Board will approve applicable plan updates and the Executive Director will sign any updated plan into authority.

Section 3 – Safety Performance Targets

TBARTA has established safety performance targets based on the safety performance measures reported under the National Public Transportation Safety Plan. These measures will be evaluated periodically to determine when action must be taken to address inadequate safety performance. The assessment of the system's safety performance information may not directly reveal shortcomings, but rather discloses that risk exists. A deeper data analysis may be required to determine how best to address safety deficiencies.

A plan to address identified safety deficiencies may involve:

- Addressing underlying hazards and potential consequences through Safety Risk Management;
- Changing data collection or analysis techniques to better understand current safety risks; and/or
- Testing and evaluating new approaches to Safety Management System (SMS) processes.

Section 3.1 – TBARTA Annual Safety Performance Targets

Table 2. TBARTA Annual Performance/Target Metrics

	2015	2016	2017	2018	2020	4-Year Average ('15-'18)
Safety Performance Target Category – **Vanpool**	**Actual**	**Actual**	**Actual**	**Actual**	**Target**	
Total Number of Fatalities	0	0	0	0	0	0
Fatality Rate per 100,000 VRM	0.0	0.0	0.0	0.0	0.0	0.0
Total Number of Injuries	0	0	0	0	0	0
Injury Rate per 100,000 VRM	0.0	0.0	0.0	0.0	0.0	0.0
Total Number of Safety Events	0	0	0	1	0	0
Safety Event Rate per 100,000 VRM	0	0	0	0.1	0	0.0
Total Number of Major Mechanical System Failures	**7**	**6**	1	0	0	4
Vehicle Failures per 100,000 VRM	0.5	0.4	0.1	0.0	0	0.3
Annual VRM	1,313,057	1,355,424	1,381,309	1,714,695	--	1,441,121

VRM: Vehicle Revenue Miles, Est: estimate

Section 3.2 – Safety Performance Target Coordination

TBARTA staff will communicate annually the safety performance targets of the Regional Vanpool Program to the five metropolitan planning organizations (MPOs) that reside within the TBARTA service area. These five MPOs include Forward Pinellas, the Hernando/Citrus MPO, the Hillsborough

MPO, the Sarasota/Manatee MPO, and the Pasco County MPO. Upon completion of the PTASP, in which the performance targets are established, the safety activities will be monitored regularly, and documentation of these activities will be made available at internal safety meetings. The safety performance target review shall include discussions about whether performance targets are being met, and what mitigation measures can be implemented to meet any unachieved established performance targets. An evaluation of the performance targets shall also consider whether the targets are realistic and attainable. If it has been determined that any target is not attainable, recommendations for modification or replacement of the target may be considered.

By June 30th of each year the Safety Performance targets will be transmitted to FDOT, the TBARTA Governing Board, and the local MPOs for record retention.

Section 4 – Safety Management Policy

For the purpose of this PTASP, TBARTA refers to both TBARTA personnel and its contractor team as "employees" of the TBARTA system. TBARTA and its contractor have adopted SMS principles, following the safety management processes identified in this PTASP and in the corresponding System Safety Program Plan (SSPP) developed by the contractor. Working together, TBARTA and its contractor will implement, maintain, and continuously improve safety management processes to ensure TBARTA and the contractor employees, customers, and the general public are safe when on TBARTA property and travelling using vanpool services.

Section 4.1 – Policy Statement and Objectives

Safety is a core value of TBARTA and its management team and TBARTA is committed to developing, implementing, maintaining and constantly improving processes to ensure the safety of all TBARTA employees, customers and the general public.

The SMS process will be utilized to reinforce safety as the top priority and to invest organizational resources – people, processes, and technology – at a level scaled to the size, scope and complexity of TBARTA.

TBARTA is committed to:

Executive Commitment to Safety: Executive management will lead the development of an organizational culture that promotes safe operations and provides appropriate resources to supporting this core management function by fostering and ensuring safe practices, improving safety when needed, and encouraging effective employee safety reporting and communication. TBARTA holds executives, contracted managers, and contracted employees accountable for safety performance. However, the responsibility for safety ultimately rests with the Accountable Executive.

Responsibility & Accountability: The Accountable Executive is accountable for ensuring that TBARTA's SMS is effectively implemented throughout the system and action is taken as necessary. The Accountable Executive may delegate specific responsibilities, but the ultimate accountability for TBARTA's safety performance cannot be delegated and always rests with the Accountable Executive. All levels of management must ensure the performance of TBARTA's SMS, take an active role in the safety risk management process, and ensure that safety assurance functions are adequately supported. Managers and contracted staff are also responsible for safety risk management by ensuring safety risk associated with safety hazards are assessed and mitigated.

Communication & Training: Employee engagement is crucial to a functioning SMS. Communication systems will be put in place to enable greater awareness of TBARTA's safety objectives and safety performance targets as well as to provide on-going safety communication throughout the organization, including all contractors. Management must proactively engage employees and work to

keep the lines of safety communication honest and open. All employees and contractors will be made aware of the importance of TBARTA's SMS through training on safety reporting procedures.

Responsibility of Employees & Contractors: All employees and contractors will support the safety management system by ensuring that hazards are identified and reported.

Employee Safety Reporting Program: Executive management will establish an Employee (and contractor) Safety Reporting Program (ESRP) as a viable tool for employees/contractors to voice safety concerns. All TBARTA contractors must adopt this program. All frontline employees/contractors will be responsible for utilizing this program as part of the SMS. No retaliation will be taken against any employee/contractor who communicates a safety condition through TBARTA's ESRP unless such disclosure indicates the following: an illegal act, gross misconduct or negligence, or a deliberate or willful disregard of TBARTA's or its contractor's rules, policies, and procedures.

TBARTA and contractor management support, encourage and accept both positive and negative feedback. To report safety concerns, employees can contact the employee hotline at (877) 354-6577. Employees may also submit safety concerns electronically via email to safety@tbarta.com. Employees may also submit a hard-copy note in the Safety Concern Box located in the employee break room.

Performance Monitoring & Measuring: TBARTA will establish realistic measures of safety performance and establish safety performance targets to ensure continual improvement in safety performance. Managers will verify that the safety risk mitigations put in place are appropriate and effective.

Review & Evaluation: TBARTA will measure SMS performance by analyzing key safety performance indicators, reviewing inspections, investigation and corrective action reports, and auditing the processes that support the SMS. These activities will become the basis for revising or developing safety objectives, safety performance targets and plans with the goal of continuous safety improvement. TBARTA will also review applicable safety data from all contractors to support this effort.

Section 4.2 – Safety Management Policy Communication

Safety communication methods will be comprised of both internal and external platforms and tools. TBARTA and the vanpool contractor will make all SMS and PTASP initiatives and updates available in their respective workplaces and this information will also be available electronically on TBARTA's website.

The Accountable Executive, or designee, is responsible for media communications regarding safety issues and in consultation with TBARTA's legal counsel and the Director of Communications, where appropriate.

Section 4.3 – Authorities, Accountabilities, and Responsibilities

Safety accountability and responsibilities span from executive management to contract management to vanpool drivers. All employees, whether TBARTA personnel or contracted employees, are responsible for safe operations of TBARTA, as outlined in the safety management policy statement.

The Accountable Executive provides strategic direction and has the responsibility for providing the leadership and resources to carry out the safety management system plan.

The following defines the roles of individuals responsible for the development and management of TBARTA's Safety Management System (SMS).

Chief Safety Officer or SMS Executive: The Director of Commuter Services has been appointed as the Chief Safety Officer for TBARTA. Under guidance from the Executive Director, the Chief Safety Officer is responsible for developing and updating the PTASP and Safety Management System (SMS) implementation plan with input and assistance from the Executive Director, the Principal Planner, and Enterprise branch manager (or other staff person designated by Enterprise Leasing Company of Florida, LLC). The Director of Commuter Services is also responsible for monitoring the vanpool contractor's safety practices to ensure compliance with this PTASP and to make certain the vanpool service is safe and sustainable.

Agency Executive Management: The Executive Director, acting as the Accountable Executive, has overall responsibility for implementing the PTASP. However, all TBARTA's executive management as well as the executive management of TBARTA's vanpool contractor are tasked with ensuring that TBARTA's safety policies and procedures are followed and communicated throughout the agency. Executive management of TBARTA and the contractor will provide positive leadership and direction in maintaining safety as a major priority in all operations. This group is responsible for providing resources to acquire and maintain safety and health equipment, devices, and programs. They will support safety standards and behaviors ensuring that all employees are encouraged and empowered to identify and mitigate hazard and risk.

TBARTA has the ultimate responsibility of developing and implementing the PTASP, while the vanpool contractor is responsible for daily operations. Therefore, it is essential that the Chief Safety Officer

and the Enterprise branch manager (or designee) work together to ensure that the plan is implemented and promoted with a coordinated effort. The Chief Safety Officer and the Enterprise branch manager (or designee) will stay informed of law changes or updates concerning employee safety and record keeping, and TBARTA will amend safety policies as required. This group will conduct periodic reviews of safety standards to remain current with federal and state requirements. The Chief Safety Officer and the Enterprise branch manager (or designee) will provide guidance in maintaining a high standard of safety training programs and assist in safety data analysis to identify future mitigation strategies. The Chief Safety Officer and the Enterprise branch manager (or designee) will conduct annual audits to ensure compliance with federal, state and local rules and regulations as well as company/contractor policies and procedures.

Contractor Roles and Responsibilities

Enterprise has identified the following specific roles and responsibilities for their supervisors and managers related to supporting TBARTA's SMS framework as outlined in this plan.

- *Director of Sales and Commute Division* – Responsible for oversight of the Commute program for Enterprise.
- *Branch Manager* – Responsible for daily operations, maintenance scheduling, fleet scheduling, customer service, account receivables, vendor relations, and new van deliveries/scheduling. The Branch Manager reports to the Director of Sales and Commute Division
- *Account Executive* – Responsible for outside sales, existing account relations, new vehicle deliveries/scheduling, account receivables. The Account Executive reports to Director of Sales and Commute Division.

Section 4.4 – Employee Safety Reporting Program

All employees are strongly encouraged to report safety concerns. The Employee Safety Reporting Program (ESRP) offers several ways that these concerns can be reported. They include:

- Speaking or writing directly to the Chief Safety Officer;
- Calling or emailing the Safety Hotline at (877) 354-6577 or safety@tbarta.com;
- Dropping a note in the Safety Concern Box located in the TBARTA employee break room;
- Informing one's supervisor. The supervisor is then required to report the concern to the Chief Safety Officer; and/or
- Making the concern known at a scheduled safety committee meeting.

Although all employees are encouraged to report safety conditions to senior management without threat of disciplinary action, disciplinary action could result if the condition reported reveals the employee willfully participated in or conducted an illegal act, gross negligence or deliberate or willful disregard of regulations or procedures, including violating motor vehicle laws or safety policies adopted by the contractor.

Drivers in TBARTA's Regional Vanpool Program are neither commercially licensed drivers nor TBARTA employees. Vanpool drivers share the ride with other passengers of the vanpool and drive to a common destination. Nevertheless, all members of the TBARTA Regional Vanpool Program will be made aware of the Safety Hotline and will be encouraged to report unsafe conditions related to the vanpool program.

Members of the Regional Vanpool Program also have the option of contacting Enterprise directly to express safety concerns. Enterprise will advise TBARTA of all reported safety concerns and their resolution. At times, a resolution will be completed with the assistance of TBARTA when the mitigation measure is outside of the contractor's control. In these circumstances, the reported condition will be forwarded to TBARTA for follow up.

Section 5 – Safety Risk Management

Section 5.1 – Safety Risk Management Process

It is the intent of TBARTA and its contractor's safety risk management processes to promote the identification of hazards or risks before hazards escalate into accidents or incidents. The following section will identify what methods TBARTA and its contractor will use to identify hazards and the consequences of those hazards, the processes used to assess the safety risks associated with the identified hazards, and the methods used to identify mitigations or strategies necessary as a result of safety risk assessments.

Section 5.2 – Safety Hazard Identification

Safety hazards or concerns, threats, and vulnerabilities of TBARTA are primarily identified through the collection of historical data, incident reports submitted by drivers, supervisors, and contractor's staff, data collected through the employee safety reporting program (ESRP), and information provided by federal and state agencies and local law enforcement. Additionally, TBARTA evaluates safety data provided by its vanpool contractor to identify the origin of identified safety concerns or potential sources of hazards. Data is analyzed to identify any patterns or trends that may exist. The findings of the evaluation are documented and used to establish corrective actions to prevent hazards in the future. Actions taken as hazard mitigation measures are monitored to evaluate their effectiveness.

Information resources evaluated to properly identify safety hazards include, but are not limited to:

- Vanpool driver incident reports
- Risk management reports
- Passengers' letters and telephone calls
- Management's written concerns
- Staff meeting notes
- Special requests
- Historical data
- Information from public safety officials
- TBARTA or contractor observed hazards
- Employee reported concerns

Investigations

As part of TBARTA's PTASP, safety events are investigated by the contractor to identify causal factors to the extent possible. These safety events may include accidents, incidents, and occurrences.

As defined in Title 49 C.F.R. 673.5 "Investigation" is defined as "the process of determining causal and contributing factors" for the purpose of "preventing recurrence and mitigating risk". Causal and contributing factors may include key actions, situations, or conditions, or the elimination of factors that may have prevented or reduced the effects of the safety event.

Investigations are an important source of data for monitoring and measuring compliance with, and effectiveness of, procedures and safety risk mitigations.

Hazards identified, whether from the contractor or TBARTA, in investigations are considered in TBARTA's safety risk management process. Some of these may include:

- Potential hazards reported by TBARTA staff members
- Training and evaluation information
- Safety performance measures reported by the contractor
- Vehicle performance and maintenance information
- Potential hazards reported relating to TBARTA facilities

Causal and contributing factors also present potential issues and concerns that are assessed through the contractor and TBARTA's safety risk management process. These factors may include organizational issues, technical failures, environmental conditions, and other issues.

Safety Trend Analysis

Safety trend analyses identify patterns or changes that might otherwise be overlooked during the collection of safety data. Patterns and changes in trends over time can be related to behavior, occurrences, or other aspects of operations. TBARTA reviews safety data including what the contractor provides on a monthly basis. Notable trends may indicate hazards to be assessed through TBARTA and its contractor's safety risk management process.

Internal Safety Audits

Internal safety audits and reviews highlight the health of the Safety Management System (SMS) culture at TBARTA and within the contractor's system. TBARTA will hold quarterly safety team meetings to evaluate internal safety performance with the Chief Safety Officer, Principal Planner, and Executive Assistant, and the vanpool contractor to review the past quarter's calls and emails to the Safety Hotline as well as safety concern notes left in the Safety Concern Box in order to spot any trends.

Monitoring of Normal Operations

TBARTA staff will receive performance information from the contractor which will indicate the efficiency and safety of the vanpool service.

External Sources

External sources also provide valuable information to review safety performance and identify hazards including:

- FTA and other oversight authorities, which provide information based on federal, state or local findings, research, considerations, or assessments.
- Reports from the public, such as motorists, bicyclists, or pedestrians, which may contain safety information such as reckless driving, near misses, unsafe acts, or inattention.

Management should confirm these reports before entering the reported hazard in the Safety Risk Management (SRM) queue.

- Safety audit findings and recommendations, which often require action in response to underlying concerns the agency may want to run through its SRM process.
- Safety bulletins and information from manufacturers and transit associations, which may identify issues or concerns to be reviewed by TBARTA's SRM process.
- Contractor safety bulletins or directives that may contain pertinent safety data or information that can be used to enhance TBARTA's SRM process.

TBARTA reviews safety/security information resources and determines if additional methods should be used to identify system threats and vulnerabilities. The review includes a formal evaluation program to ensure that safety/security procedures are maintained and that safety/security systems are operable.

Other potential sources of hazard to TBARTA include the following:

Accidents

Vanpool vehicle accidents – defined as collisions with other vehicles, objects or persons with the potential for damage to people and/or property and the possibility of lawsuits and/or criminal charges. Major accidents and incidents are reported monthly in the National Transit Database (NTD) SS-40 Safety and Security Reports.

Transit passenger incidents – defined as non-collision events, which may include passenger falls, injuries relating to lift and securement operation, injuries before boarding or after alighting, and passenger illnesses. Non-major incidents are reported monthly in the NTD SS-50 Safety and Security Reports.

Employee accidents and incidents – defined as non-collision events that occur on-premises, on official travel, or while maintaining equipment, but not while operating a vanpool vehicle, which may have resulted in injuries. Such accidents/incidents create the possibility for loss of workforce, worker's compensation claims, etc.

Acts of Nature

Floods – heavy rain and storm surge may cause flooding that can result in loss of life, damage to facilities, danger to vehicles on roadways, and loss of power and communications.

Forest Fire – an uncontrolled fire in a wooded area that may damage buildings and restrict access to roadways. Severe fires may have effects on the environment.

Fog – a thick cloud of tiny water droplets suspended in the atmosphere at or near the earth's surface that obscures or restricts visibility.

Hurricanes – a storm with severe winds and potential accompanying storm surge that can result in damage to property, structures, and potentially loss of life.

Critical Infrastructure

Power outages – whether short or long in duration, can impact overall ability to operate transit services and limit functional nature of transit equipment and facilities.

Vehicle fires – could cause vanpool riders injuries and death, and/or damage or loss of transit equipment and have the potential for lawsuits.

Facility loss – loss of administrative facilities– whether caused by structural collapse, presence of toxic materials, violation of municipal codes, fire, or significant events on neighboring properties – can hamper the ability to sustain service.

Hazardous Materials

Blood-borne pathogens – exposure can put employees and vanpool riders at risk of contracting disease.

Section 5.3 – Safety Risk Assessment

All identified and system accepted hazards, near-miss situations, and safety events that occur shall be risk assessed. Safety risk assessment will be conducted for the "as reported" hazardous condition and again conducted for the "mitigated" condition.

Additionally, and separated to individual proactive reports, system-wide annual risk assessments will be conducted. The risk assessment and risk control process shall be reviewed and revised:

- As a part of TBARTA's quarterly safety meetings
- As applicable due to new or revised activities or procedures
- Annually by management

A safety risk assessment has two elements: hazard severity and hazard probability. Hazard severity is a qualitative determination of the worst likely case that could be anticipated because of human error, poor design, failure or malfunction of component(s). Hazard severity ratings are as follows:

- Catastrophic – Operating conditions are such that human error, poor design, failure or malfunction of components may commonly cause multiple deaths, numerous casualties or major system loss. Catastrophic hazards require immediate cessation of the unsafe activity or operation.
- Critical – Operating conditions are such that human error, poor design, failure or malfunction of components may commonly cause death, limited casualties or significant system loss that will require immediate termination of the unsafe activity or operation.
- Serious – Operating conditions are such that human error, environment, poor design, failure or malfunction of components or procedural deficiencies may commonly cause severe injury,

severe occupational illness, or major subsystem damage requiring immediate corrective action.

- Marginal – Operating conditions are such that they commonly cause minor injury, minor occupational illness, or minor system damage. Human error or component failures can be controlled or counteracted.
- Negligible – Operating conditions are such that human error, poor design, failure or malfunction of components may commonly cause no, or less than minor injury, occupational illness, or system damage.

Hazard probability is a subjective measure of likelihood that a specific hazard will occur during the useful life of the asset. Hazard probability is categorized as follows:

- Frequent – Likely to occur frequently
- Probable – Likely to occur several times
- Occasional – Likely to occur sometimes
- Remote – Unlikely but possible to occur
- Improbable – So unlikely that it can be rejected from consideration

Hazard severity and probability can be considered coincidentally using a Risk Assessment Matrix (Table 3). A Risk Assessment Matrix helps to assess the level of risk (risk rating) for each identified hazard and subsequent control measures to apply through hazard resolution or mitigation, to rank the prioritization of limited resources in the event that more hazards are identified than budget allocation allows for the implementation of hazard elimination or mitigation measures.

Table 3. Risk Assessment Matrix

LIKELIHOOD	POTENTIAL CONSEQUENCES OR SEVERITY				
	Catastrophic	Critical	Serious	Marginal	Negligible
Frequent	Very High	Very High	High	Moderate	Low
Probable	Very High	High	High	Moderate	Low
Occasional	High	High	Moderate	Moderate	Low
Remote	High	Moderate	Moderate	Low	Very Low
Improbable	Moderate	Moderate	Low	Very Low	Very Low

Table 4. Risk Rating

RISK RATING	ACTION REQUIRED
Very High	Risk must be immediately mitigated and constantly monitored
High	Risk must be treated and constantly monitored
Moderate	Risk may be managed, and reduction strategies implemented
Low	Risk may be accepted after a risk review
Very Low	Risk would normally not be treated

Section 5.4 – Safety Risk Mitigation

Each hazard category in the Risk Assessment Matrix (Table 3) requires a specific level of resolution and control as shown in the Risk Rating Matrix (Table 4).

Hazard resolution and/or control involves the analysis and corrective action taken to eliminate or reduce the risk associated with an identified hazard to the lowest practical level. In most cases, acceptable hazard resolution will require a combination of actions or methods of control. The Hazard Decision Matrix is displayed in Table 5. The preferred order to satisfy system safety requirements and resolve the identified hazards is as follows:

- Design to eliminate/minimize risk. Where possible, hazards will be eliminated through design. If the hazard cannot be eliminated because it is inherent or is not financially feasible, it will be reduced to an acceptable level. Specific actions to be taken include building in redundancy or backups, use of highly reliable components, use of fail-safe devices, or transferring the risk to a third party.
- Use appropriate safety devices for hazards that cannot be eliminated or minimized through design. This involves the installation of permanent system design features to improve safety by automatically controlling the risk of hazard with no human intervention.
- Use warning devices to reduce the risk associated with the hazard to an acceptable level. This is applicable when neither design nor safety devices can effectively eliminate identified hazards or adequately reduce the risk associated with the hazard to an acceptable level.
- Approved procedures and training programs are the lowest level of control, and they will be used when it is not possible or practical to eliminate hazards or reduce risks through system design, and safety or warning devices. The purpose of training programs is to recognize hazards and personnel actions that can be taken to avoid hazards. Procedures will include precautionary notations, warning signs and use of personal protective equipment.

Enterprise also has an established SSPP, which helps support TBARTA's SMS and PTASP. As reinforcement of TBARTA's PTASP, Enterprise and TBARTA staff will review identified risks during monthly meetings or as necessary and an action plan will be discussed. It is the responsibility of the

Chief Safety Officer to monitor the mitigation process. Enterprise's Branch Manager (or designee) will ensure the mitigation process that is agreed upon is carried out and completed.

Table 5. Hazard Decision Matrix

FREQUENCY OF OCCURRENCE	HAZARD CATEGORY				
	Catastrophic	**Critical**	**Serious**	**Marginal**	**Negligible**
Frequent	Unacceptable	Unacceptable	Unacceptable	Undesirable	Undesirable
Probable	Unacceptable	Unacceptable	Undesirable	Undesirable	Acceptable with Review
Occasional	Unacceptable	Undesirable	Undesirable	Acceptable with Review	Acceptable with Review
Remote	Undesirable	Undesirable	Acceptable with Review	Acceptable with Review	Acceptable
Improbable	Acceptable with Review	Acceptable with Review	Acceptable with Review	Acceptable	Acceptable

Section 6 – Safety Assurance

Section 6.1 – Safety Performance Monitoring and Measurement

TBARTA's safety assurance processes within the PTASP functions to ensure the implementation and effectiveness of safety risk mitigation, and to ensure TBARTA meets or exceeds its safety objectives through the collection, analysis, and assessment of information. As the agency is responsible for oversight of the vanpool service delivery provided by a contractor, TBARTA will ensure the safety assurance requirements are met and the data/documentation collected and maintained are archived for a minimum of three years and will be made available upon request by all reviewing agencies.

Safety assurance is the means to demonstrate that organizational arrangements and processes for safety achievement are properly applied and continue to achieve their intended objectives. This is achieved through safety performance monitoring and measurement processes by which the performance is verified against the stated safety policy, safety objectives, and targets. The safety performance monitoring and measurement for TBARTA includes activities that:

- Monitor system compliance with and sufficiency of the procedures for operations and maintenance;
- Monitor operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended;
- Conduct investigations of safety events to identify causal factors; and
- Monitor information reported through any internal safety reporting programs.

Section 6.2 – Operations and Maintenance Monitoring Procedures

Vanpool Driver Selection

Drivers in TBARTA's Regional Vanpool Program are not employees of TBARTA. Vanpool drivers are part of a group of commuters who have come together to share a ride to work and have volunteered to drive the vanpool. It is important to establish that these individuals have a safe driving record, and Enterprise has criteria in place to ensure this happens. Prior to attaining approval as a vanpool driver, an individual must undergo a Motor Vehicle Records Check. Vanpool drivers must meet the following criteria:

1. Possess a valid driver's license.
2. Be 25 years of age or older.
3. Have no more than two moving violations and/or at-fault accidents in the previous three years, and no more than four moving violations and/or at-fault accidents in the previous five years.
4. Have no major convictions in the past five years (e.g., driving under the influence of alcohol or drugs, driving while impaired, failure to stop and report an accident, driving while license is suspended or revoked, possession of drugs or open containers of alcoholic beverages, reckless

driving and/or participating in a speed contest, drag or highway race, or attempting to elude authorities).

5. Be licensed in the United States for a minimum of five years.
6. Meet and comply with any laws/criteria required by the state where the vanpool is operated.

The Chief Safety Officer, or designee, periodically inspects the records of the vanpool drivers to ensure these safety-related items were processed as part of the selection process.

Drug and Alcohol Policies

A critical element of TBARTA's commitment to safe operations is ensuring that employees are not impaired due to the use of alcohol, illegal drugs, prescription drugs or over-the-counter medication. TBARTA requires its vanpool contractor to follow the requirements set forth under Title 49 C.F.R. Part 655 and Title 49 C.F.R. Part 40 Amended, as mandated by the FTA. Enterprise requires all employees that work in a safety-sensitive position to undergo drug and alcohol testing.

The drug and alcohol screening can occur at any of these stages of employment: Pre-employment, random, post incident/accident, and/or reasonable suspicion. Enterprise's drug and alcohol procedures are explained in detail in their SSPP. The Enterprise drug and alcohol program manager, or designee, monitors the contractor's drug and alcohol testing program for compliance.

Safety and Security of Vanpool Drivers and Passengers

Driver's Vehicle Checklist

Vanpool drivers sign a Driver Agreement with Enterprise that outlines the steps for a pre-trip inspection. These steps are as follows:

- Check in, under, and around the vehicle for objects or obstacles each time before the vehicle is operated.
- Pay attention to how close other vehicles are parked next to the vehicle.
- Before starting out, make sure all doors are closed securely, passengers are wearing their seat belts, and that nothing blocks the visibility out of the front, side, or rear windows.
- Alert riders when departing and ask for assistance with blind spots, if necessary, before putting the van in gear.
- Establish a weekly routine to check safety and maintenance related items on the van.
- Ensure that mirrors are clean and properly aligned for viewing.
- Check the windshield wipers to verify they are in good shape.
- Check all fluid levels, including windshield washer fluid, oil, and gas.
- Check the overall condition of tires for any signs of damage or uneven wear.
- Make sure that seat belts are available and operable.

Vehicle Maintenance

Enterprise has an adopted SSPP that, among other things, outlines its maintenance procedures. It identifies procedures for preventive maintenance, warranty or recall maintenance, and unscheduled repairs.

Preventive Maintenance: Enterprise monitors vehicle mileage and alerts the vanpool coordinator by email of any required routine maintenance two weeks before the due date. Automatic reminders are resent one week prior to the due date with a system-generated task assigned to the local team to follow up with the coordinator.

Warranty or Recall Maintenance: Enterprise's maintenance operating system ensures that vanpool drivers are made aware of any manufacturer mandated safety recalls. After being notified of a recall, Enterprise alerts the affected groups and remedies the recall as soon as possible.

Unscheduled Repairs: Unscheduled repairs can be performed at any Enterprise authorized local maintenance facility and are included as part of the monthly lease.

Enterprise has an established network of hundreds of servicing and repair shops across the state. These facilities include dealerships, Firestone, Goodyear and many independent shops.

Towing and Loaner Vehicles: Enterprise has established 24-hour towing to assist members of the Regional Vanpool Program in the event of a breakdown. This service is offered 7 days a week at no additional cost to the customer. Enterprise also provides loaner vehicles in the event of breakdowns or extended repair periods that interfere with normal commute times.

Section 6.3 – Safety Risk Mitigations Monitoring

The safety risk mitigation monitoring section of the PTASP ensures safety performance monitoring and measurement activities are performed and documented to confirm that mitigations are effective, appropriate, and fully implemented.

Data will be collected and stored as part of the safety assurance activities to identify performance indicators. Safety performance indicators are signals or early warning signs that will help measure inputs, outputs, outcomes, or impacts.

These performance indicators can be classified as either leading or lagging indicators. Leading indicators are used to anticipate and prevent injuries and accidents. Ride checks are a common data source of leading indicators. However, because TBARTA does not currently operate fixed route bus service, the emphasis of data collection will remain on the lagging indicators. Lagging indicators measure what happened, including accidents and injuries. Safety performance metrics will be collected and analyzed to trend historical information, and determine if risk mitigation plans are reducing accidents and injuries as intended.

Upon evaluation of the performance indicators, a corrective action plan will be developed to help address short-term defects or any compliance issues. The intent is to continuously monitor the hazards to establish corrective measures to eliminate the behavior that caused an event.

Section 6.4 – Safety Event Investigations

TBARTA and/or its contractor will conduct investigations of safety events such as accidents, incidents, and occurrences to identify causal factors. The investigations will determine preventability, and identify whether external factors such as organizational issues, technical failures, latent factors, environmental conditions or other factors may have contributed to the event. The investigation must include root cause analysis and result in a corrective action plan, if applicable, based on the hazard resolution precedence established within this plan.

In order to promote the continuous safety performance improvement of the PTASP, TBARTA and its contractor will investigate safety events promptly and thoroughly. Details of the contractor's responsibilities relating to responding to safety events are discussed in the Enterprise SSPP.

Investigations are a methodical search into an event where information relating to factors that may have caused or contributed to the event are discovered. The SMS approach uses a structured investigative process where evidence, contributing factors and root cause is recorded such that follow-up mitigating actions may be implemented and tracked.

As with any investigation, time is of the essence, therefore investigations should proceed as soon as practical to avoid potentially losing valuable information. Investigations are to be concluded within five (5) business days of the incident. Safety event investigations will be conducted by Enterprise staff.

A complete investigation is comprised of the following three stages being completed:

1. Investigation and interview stage: All relevant information is found.
2. Root cause stage: Contributing factors and root cause are determined and information is recorded.
3. Preventive Stage: Preventive strategies and recommendations are prepared and recorded.

Section 6.5 – Internal Safety Reporting Monitoring

The safety assurance process within TBARTA, and as adhered to by its contractor, is achieved by monitoring and measuring the outcomes of activities that operational personnel must engage in for the delivery of services. TBARTA management obtains information for safety performance monitoring from a variety of sources including direct employee input, contractors, hazard reporting systems, meetings, or assessments/audits.

Each of these types of information sources may exist to some degree and should be assessed on a routine schedule for risk identification and trend analysis by the contractor's managers, and safety

manager in particular. TBARTA and its contractor will accomplish continual safety performance monitoring and oversight of the PTASP as indicated below.

As a part of the annual safety objectives and targets development process, contractor's management will work with TBARTA staff to establish the initial list of safety objectives and targets.

Quarterly safety meetings where safety performance and means to continually improve safety performance will be discussed with TBARTA and contractor staff. Once data from all safety-related activity is reviewed, TBARTA and contractor's management and/or supervisors will communicate the appropriate information to all employees in the organization. This includes updating any existing response/mitigation and an assessment of the appropriateness and effectiveness of the mitigations to address the hazards or event contributing factors.

The mitigation will be considered appropriate if it actually addresses any identified hazard. The mitigation will only be considered effective if it consistently manages the safety risk under normal operating conditions. Effective mitigation must reduce the safety risks to an acceptable level as defined by the risk assessment in the risk assessment matrix (Table 5). Management will also propose prioritization of the responses/mitigations based on the risk assessment for each hazard.

Section 7 – Safety Promotion

Safety Promotion (SP) outlines requirements for promoting both SMS practices and safety throughout TBARTA's and its contractor's organizations and consists of two elements: competencies and training, and safety communication.

Section 7.1 – Competencies and Training

In accordance with Title 49 C.F.R. Part 673, TBARTA and Enterprise have established SMS and PTASP training scaled to their business model.

In addition to specifying direct responsibility for safety and training requirements by employment position, TBARTA identifies the competencies necessary to perform different job roles within the PTASP compliant operations. TBARTA will require all contractors and or vendors to support and implement their PTASP processes included herein, and consistent with Title 49 C.F.R. Part 673.

Enterprise utilizes a safety training program for all staff that operate vehicles. Details of the entire training program are in their SSPP located at TBARTA's office.

The purpose of PTASP training is to establish a department-level approach, which ensures that all employees and contractor staff have the appropriate level of knowledge about the TBARTA PTASP and how the policies, processes, and procedures affect how duties are performed. PTASP training will establish initial competency and form on-going competence building. Additionally, this is a method for the demonstration of the PTASP and its contribution to safety culture development.

The contractor's training outlined in their SSPP takes into account different levels of responsibility, ability, literacy, and risk to ensure that there is an appropriate awareness among employees and managers as to what their roles and responsibilities are. Accordingly, TBARTA and or its vanpool contractor will provide PTASP training as follows:

Managers/Supervisors: Awareness of PTASP roles and responsibilities, SMS fundamentals, safety policy, safety culture policy, PTASP requirements, related DOT/FTA regulations, state regulations, management commitment and responsibilities, and safety performance monitoring responsibilities.

Competence

TBARTA key safety employees and management competence within the PTASP operations will be assured through continuous communication and involvement in the PTASP as follows:

TBARTA employees responsible for safety shall be:

- Involved in the review of hazard and risk assessments, accident/incident investigation findings and department or process-specific PTASP standard operating process development where appropriate;
- Consulted regarding workplace changes that occur as a result of SMS-related activities; and

- Informed of significant issues arising from the operation of the PTASP including lessons-learned from hazards and accident/incident investigation findings.

Employee involvement shall be accomplished by:

- Reporting safety concerns via the Employee Safety Reporting Program (ESRP);
- Submission of hazard reports;
- Involvement in risk assessment results and implementation of post-event investigation findings;
- Participation in safety performance monitoring in his/her division; and/or
- Participation in PTASP assessments.

Managers shall:

- Be involved in the review of hazard and risk assessments, accident/incident investigation findings and department or process-specific PTASP standard operating process development where appropriate;
- Coordinate workplace changes that need to occur as a result of PTASP-related activities;
- Lead resolution of PTASP matters in their department;
- Coordinate resolution of significant issues arising from the operation of the PTASP at their site, including lessons-learned from hazards, and implementation of accident/incident investigation findings; and/or
- Lead quarterly department PTASP reviews.

Section 7.2 – Safety Communication

In accordance with Title 49 C.F.R. Part 673, TBARTA and its vanpool contractor document and maintain records of safety and safety performance, which are then communicated throughout the organization.

TBARTA's safety communication includes information on hazards and safety risk relevant to employees' roles and responsibilities. TBARTA informs employees of safety actions taken in response to reports submitted through the ESRP (Section 4.4 – Employee Safety Reporting Program).

The vanpool contractor is required to consistently reinforce the PTASP through participation in quarterly TBARTA safety meetings, memos, one-on-one discussions with vanpool drivers, and on-going analysis of safety data to identify unsafe behavior and take swift corrective action when needed. At the quarterly safety meetings, any employee reports regarding incidents or observed unsafe conditions are reviewed and mitigation strategies, if warranted, are discussed and followed by development of a corrective action plan.

To ensure that employees understand what is communicated or what action they must take as a result of the information, questions are asked of the employees and safety messages are repeated/re-enforced depending on the responses received.

TBRTA and its vanpool contractor review the information that is disseminated to employees.

Definitions of Special Terms Used in the Safety Plan

Accident – Accident means an event that involves any of the following: a loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.

Accountable Executive – Accountable Executive means a single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with Title 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan in accordance with Title 49 U.S.C. 5326.

Chief Safety Officer – Chief Safety Officer means an adequately trained individual who has responsibility for safety and reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. A Chief Safety Officer may not serve in other operational or maintenance capacities, unless the Chief Safety Officer is employed by a transit agency that is a small public transportation provider as defined in this part, or a public transportation provider that does not operate a rail fixed guideway public transportation system.

Event – Event means any Accident, Incident, or Occurrence.

Federal Transit Administration – Federal Transit Administration, an operating administration within the United States Department of Transportation.

Hazard – Hazard means any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.

Incident – Incident means an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.

Investigation – Investigation means the process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.

National Public Transportation Safety Plan – National Public Transportation Safety Plan means the plan to improve the safety of all public transportation systems that receive Federal financial assistance under Title 49 U.S.C. Chapter 53.

Occurrence – Occurrence means an Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.

Operator – Operator of a public transportation system means a provider of public transportation as defined under 49 U.S.C. 5302(14).

Performance Measure – Performance measure means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.

Performance Target – Performance target means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).

Public Transportation Agency Safety Plan (PTASP) – Public Transportation Agency Safety Plan means the documented comprehensive agency safety plan for a transit agency that is required by Title 49 U.S.C. 5329 and this part.

Risk – Risk means the composite of predicted severity and likelihood of the potential effect of a hazard.

Risk Mitigation – Risk mitigation means a method or methods to eliminate or reduce the effects of hazards.

Safety Assurance – Safety Assurance means processes within a transit agency's Safety Management System that functions to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information.

Safety Management Policy – Safety Management Policy means a transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety.

Safety Management System (SMS) – Safety Management System (SMS) means the 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 risks and hazards.

SMS Executive – Safety Management System (SMS) Executive means a Chief Safety Officer or an equivalent.

Safety Performance Target – Safety Performance Target means a Performance Target related to safety management activities.

Safety Promotion – Safety Promotion means a combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.

Safety Risk Assessment – Safety Risk Assessment means the formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks.

Safety Risk Management – Safety Risk Management means a process within a transit agency's Public Transportation Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.

Serious Injury – Serious injury means any injury which:

(1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received;
(2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses);
(3) Causes severe hemorrhages, nerve, muscle, or tendon damage;
(4) Involves any internal organ; or
(5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.

Small Public Transportation Provider – Small public transportation provider means a recipient or subrecipient of Federal financial assistance under Title 49 U.S.C. 5307 that has one hundred (100) or fewer vehicles in peak revenue service and does not operate a rail fixed guideway public transportation system.

State – State means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.

Transit Agency – Transit agency means an operator of a public transportation system.

Transit Asset Management Plan – Transit Asset Management Plan means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation, as required by Title 49 U.S.C. 5326 and Title 49 C.F.R. part 625.

List of Acronyms Used in the Safety Plan

C.F.R.	Code of Federal Regulations
ESRP	Employee Safety Reporting Program
FDOT	Florida Department of Transportation
FTA	Federal Transit Administration
MPO	Metropolitan Planning Organization
PTASP	Public Transportation Agency Safety Plan
RTDP	Regional Transit Development Plan
SMS	Safety Management System
SRM	Safety Risk Management
SP	Safety Promotion
SSPP	System Safety Program Plan
TBARTA	Tampa Bay Area Regional Transit Authority
U.S.C.	United States Code