Memorandum

MIAMI-DADE COUNTY

Date: January 22, 2025

Agenda Item No. 8(N)(7)

To: Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

From: Daniella Levine Cava
Mayor

Daniella Levine Cava

Subject: Resolution Approving and Authorizing the Execution of the Department of Transportation and Public Works' Calendar Year 2024 Public Transportation Agency Safety Plan

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Executive Summary

The purpose of this item is for the Department of Transportation and Public Works (DTPW) to gain approval of the Board of County Commissioners (Board) for its Calendar Year 2024 Public Transportation Agency Safety Plan (PTASP). Board approval on an annual basis is required per the Federal Transit Administration (FTA) regulations. The PTASP must be approved by December 31, 2024.

Recommendation

It is recommended that the Board approve the Calendar Year 2024 DTPW PTASP (attached as Exhibit 1 to the Resolution).

Delegated Authority

The Board hereby designates the DTPW Director as the Accountable Executive who shall execute and deliver the PTASP on behalf of the Department.

Scope

The PTASP will be delivered to the Metrorail, Metromover and Metrobus Systems throughout the County for application, and therefore, the impact of this item is countywide in nature.

Fiscal Impact/Funding Source

The PTASP will neither have an impact on current nor future annual County budgets.

Track Record/Monitor

The Accountable Executive for this PTASP covering 2024 is Eulois Cleckley, DTPW Director and CEO.

Background

Following general requirements and guidelines from the Code of Federal Regulations, 49 CFR 674, in compliance with the Fixing America's Surface Transportation (FAST) Act, and to meet the FTA State Safety Oversight Standard, DTPW has developed a consolidated bus and rail PTASP as its governing system safety plan. The FTA requires the local governmental authority and any other operator of a public transportation system that receives federal financial assistance under 49 U.S. Code Chapter 53 to certify that it has established a comprehensive PTASP and have it approved by their governing body.

The 2024 DTPW PTASP included the following changes:

- Included new Miami Dade County, DTPW & Office of Safety and Security Organizational Charts
- Updated PTASP Annual Update Process
- Updated Bus Fleet Types/Quantities & Completion Date for Northeast Division Compressed Natural Gas (CNG) Fueling Station & South Dade Bus Rapid Transit System
- Included Bipartisan Infrastructure Law in Policy Statement
- Replaced System Safety Review Board with DTPW Executive Committee in PTASP Committees
- Florida Department of Transportation (FDOT) Authority for Risk-Based Inspections

The 2024 DTPW PTASP documents the processes and activities related to Safety Management System (SMS) implementation to ensure an increased prevention of hazardous conditions prior to an injury or equipment damage occurring and compliance with regulatory standards such as OSHA, FTA and FDOT.

The PTASP must be adopted by the Board on or before December 31, 2024.

Jimmy Morales
Chief Operating Officer

MEMORANDUM

(Revised)

TO: Honorable Chairman Anthony Rodríguez
and Members, Board of County Commissioners

DATE: January 22, 2025

FROM: Geri Bonzon-Keenan
County Attorney

SUBJECT: Agenda Item No. 8(N)(7)

Please note any items checked.

_____ **"3-Day Rule" for committees applicable if raised**

_____ **6 weeks required between first reading and public hearing**

_____ **4 weeks notification to municipal officials required prior to public hearing**

_____ **Decreases revenues or increases expenditures without balancing budget**

_____ **Budget required**

_____ **Statement of fiscal impact required**

_____ **Statement of social equity required**

_____ **Ordinance creating a new board requires detailed County Mayor's report for public hearing**

_____ **No committee review**

_____ **Applicable legislation requires more than a majority vote (i.e., 2/3's present ____, 2/3 membership ____, 3/5's ____, unanimous ____, majority plus one ____, CDMP 7 vote requirement per 2-116.1(3)(h) or (4)(c) ____, CDMP 2/3 vote requirement per 2-116.1(3) (h) or (4)(c) ____, CDMP 9 vote requirement per 2-116.1(4)(c) (2) _____) to approve**

_____ **Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required**

Approved _____ Mayor
Veto _____
Override _____

Agenda Item No. 8(N)(7)
1-22-25

RESOLUTION NO. _____

RESOLUTION APPROVING AND AUTHORIZING THE EXECUTION OF THE 2024 DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS' PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

WHEREAS, pursuant to the Florida Department of Transportation State Safety Oversight (SSO) Rules, public transit agencies are required to develop a comprehensive Public Transit Agency Safety Plan (the "PTASP") to:

(i) identify and evaluate safety risks related to the Metrorail, Metromover and Metrobus Systems;

(ii) implement strategies mitigating such risks;

(iii) establish a process for annual reviews of the safety plan;

(iv) set safety performance targets;

(v) assign safety responsibilities; and

(vi) establish a staff safety training program; and

WHEREAS, the Federal Transit Administration (FTA) requires the local governmental authority and any other operator of a public transportation system that receives federal financial assistance under 49 U.S.C. chapter 53, must certify that it has established a comprehensive PTASP and have the plans approved by their Board(s) of Directors (or equivalent authorities); and

WHEREAS, the SSO Rules require that the PTASP, and any updates to the PTASP, be approved by the Board of County Commissioners; and

WHEREAS, this Board desires to accomplish the purposes outlined in the accompanying memorandum, a copy of which is incorporated herein by reference,

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA, that:

Section 1. The Board hereby approves the attached PTASP.

Section 2. The Board hereby designates the Department Director as the Accountable Executive who shall execute and deliver the PTASP on behalf of the Department.

Section 3. The Board hereby authorizes the Department Director to execute and deliver the PTASP on behalf of the Department.

The foregoing resolution was offered by Commissioner , who moved its adoption. The motion was seconded by Commissioner and upon being put to a vote, the vote was as follows:

Anthony Rodriguez, Chairman
Kionne L. McGhee, Vice Chairman

Marleine Bastien	Juan Carlos Bermudez
Kevin Marino Cabrera	Sen. René García
Oliver G. Gilbert, III	Roberto J. Gonzalez
Keon Hardemon	Danielle Cohen Higgins
Eileen Higgins	Raquel A. Regalado
Micky Steinberg	

The Chairperson thereupon declared this resolution duly passed and adopted this 22nd day of January, 2025. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this resolution and the filing of this approval with the Clerk of the Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF
COUNTY COMMISSIONERS

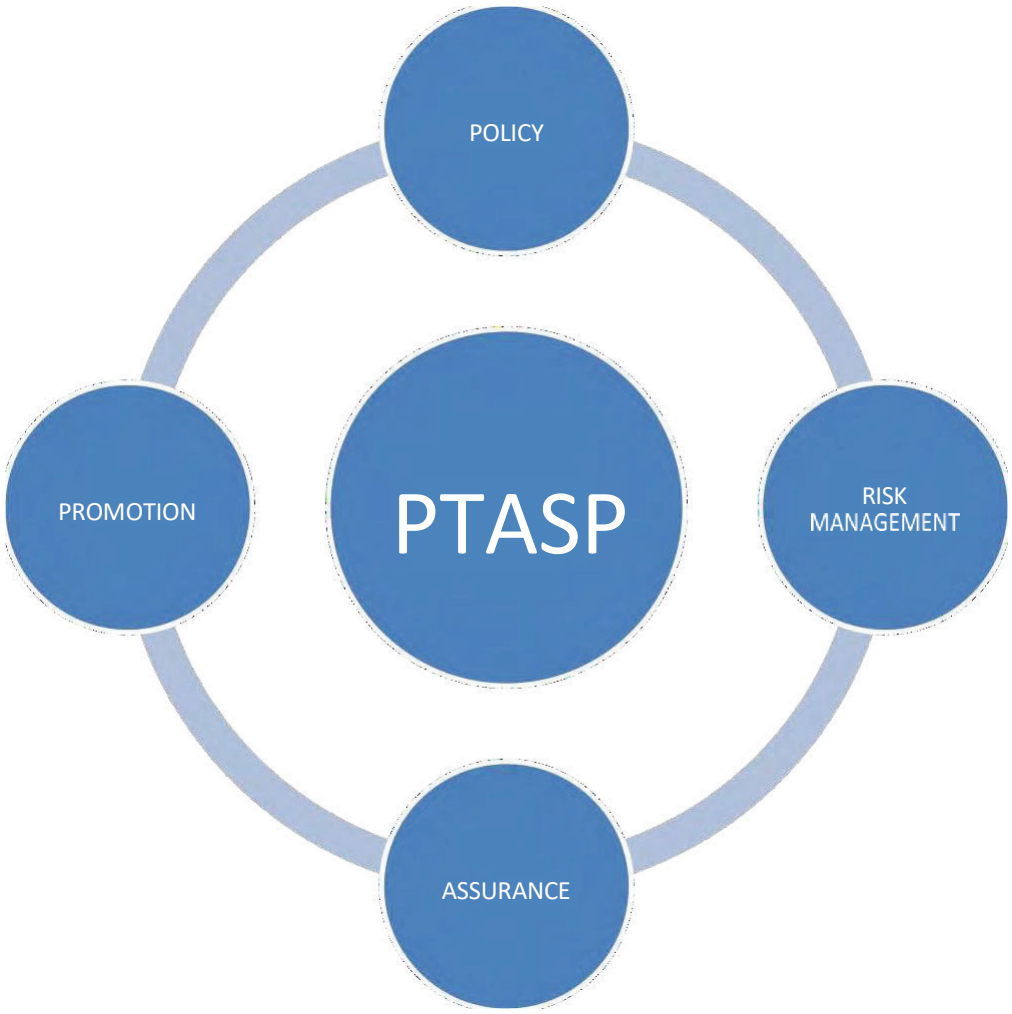
JUAN FERNANDEZ-BARQUIN, CLERK

By:_____
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.

Bruce Libhaber

Department of Transportation and Public Works Public Transportation Agency Safety Plan (PTASP)



DTPW

August 2024

Revision Table

Revision Date	Description of Revisions	Person Issuing
N/A	Initial release of PTASP	Eric J. Muntan, Chief,DTPWOffice of Safety& Security
January 2022	• Revised to specify new Executive Mayor, Board of County Commissioners & DTPW Director • Included new DTPW Organizational Chart • Updated Bus Fleet Types/Quantities • Updated Total Bus Routes & Contracted Routes • Updated Hitachi Rail Car Fleet Quantities • Incorporated Bipartisan Infrastructure Law requirements including Infectious Disease Exposure & Safety Committees	Eric J. Muntan, Chief,DTPW Office of Safety& Security
September 2023	• Included new MDC, DTPW & OSS Organizational Charts • Updated PTASP Annual Update Process • Updated Bus Fleet Types/Quantities & Completion Date for NE Division CNG Fueling Station • Included a bus history in Bus Service Section	Eric J. Muntan, Chief, DTPW Office of Safety & Security
August 2024	• Included new MDC, DTPW & OSS Organizational Charts • Updated PTASP Annual Update Process • Updated Bus Fleet Types/Quantities & Completion Date for NE Division CNG Fueling Station &South Dade Bus Rapid Transit System • Included Bipartisan Infrastructure Law in Policy Statement • Replaced System Safety Review Board with DTPW Executive Committee in PTASP Committees. • FDOT Authority for Risk-Based Inspections.	Eric J. Muntan, Chief, DTPW Office of Safety & Security

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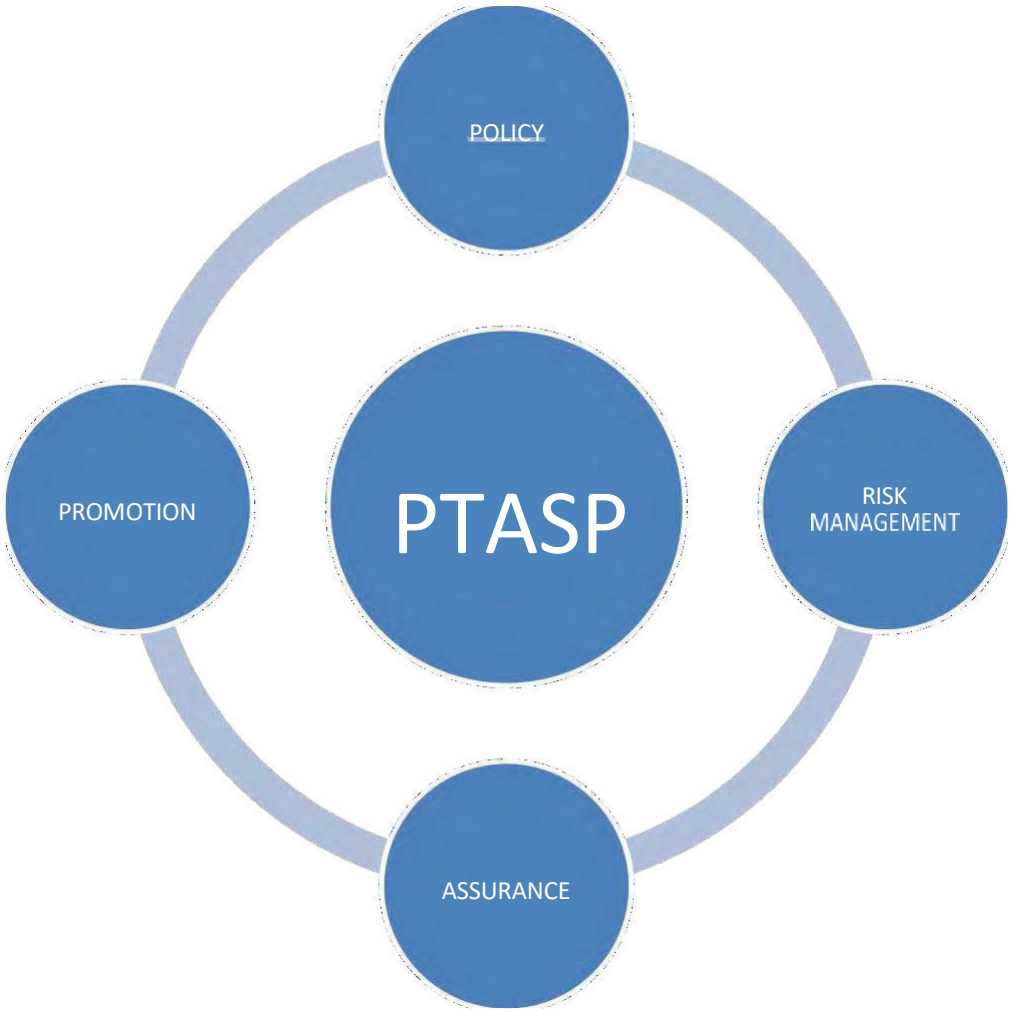
APPENDICES

I. POLICY



I POLICY

The Public Transportation Agency Safety Plan is composed of four functional components or pillars, based on safety management system principles. They are:

Safety Policy
Safety Risk Management
Safety Assurance
Safety Promotion

Pillar I of the Public Transportation Agency Safety Plan is the **Safety Policy** which is developed, approved and signed by the authority. However, this pillar also describes the Department of Transportation and Public Works' commitment to safety, its objectives, safety goals and the organizational structure established, and plans written to achieve these goals and objectives.

Authority and Policy Statement

I 1.1 Introduction

The Department of Transportation and Public Works (DTPW) is the 15th largest public transit system in the United States of America, and the largest transit agency in the state of Florida. Between its Metrorail, Metrobus, Metromover and Special Transportation Services, it connects people to their destination by providing a high-quality, safe, reliable, clean, efficient and courteous mass transit system that strives to meet the travel needs of the County's growing population and visitors. It provides vital transportation infrastructure systems and services.

DTPW also provides the following Public Works-related services:

- Maintains all traffic signals countywide, along with all traffic control signs, street signage, pavement markings, and all County and State-owned street lights.
- Builds, operates and maintains movable and fixed bridges, swales, roadway surface repairs, and guardrails along County road rights-of-way. Also operates and maintains the Rickenbacker and Venetian Causeways.
- Manages the County Storm Water Utility for flood and water quality protection and maintain the secondary canal system.
- Issues permits for all work within rights-of-way and manages code enforcement of unpermitted work.

In accordance with the directives of Moving Ahead for Progress in the 21st Century Act, (MAP-21) and Fixing America's Surface Transportation (FAST) Act, DTPW commenced to convert the Agency System Safety Program Plan (SSPP) into the Public Transportation Agency Safety Plan (PTASP), in 2019. Development of the PTASP was completed in accordance with the FDOT Fixed Guideway Transportation Systems State Safety and Security Oversight Program Standard (May 2018) and Federal Transit Administration (FTA) rules and regulations. As a result of the Bipartisan Infrastructure Law (BIL) of 2021, the DTPW PTASP was revised to comply with BIL requirements for **Safety Committees**, **Risk Reduction Programs**, **Agency Safety Plans (ASP) and Other requirements** for safety performance targets, de-escalation training for certain workers, and addressing infectious diseases through the Safety Management Systems (SMS) process.

I 1.2 Authority

FTA regulates transit agencies by granting authority to each state to develop state safety oversight programs, as defined by 49 Code of Federal Regulations (CFR) 674. On February 28, 2019, FDOT became a State Safety Oversight (SSO) certified Program, under Part 674. FDOT SSO is FTA's appointed safety oversight agency, working cooperatively to regulate DTPW's Metrorail and Metromover fixed guideway systems by ensuring compliance with state and federal requirements, regulations, and guidance, as applicable.

The FTA functions as both an administrator of funds for capital projects and as a federal regulator as defined by

49 CFR 670 and 673. The FTA conducts regular audits of the state safety oversight agency (FDOT-SSOA), to determine the SSO's and DTPW's compliance with the FTA's general requirements. DTPW's Metrorail and Metromover fixed guideway systems are regulated by the FTA and FDOT SSO agencies.

I 1.3 Policy Statement

DTPW is committed to a positive safety culture and creating a workplace that is safe, healthy, and injury free. Our employees are our most valuable assets and their safety and health is our first priority. This policy statement applies to all personnel and every aspect of the department's activities. A positive safety culture includes ownership by all employees, effort to identify and correct deficiencies at all levels, and effective communications.

DTPW utilizes a Safety Management System (SMS) to prevent accidents, to reduce risk of injury and minimize damage to property and equipment. We work proactively towards identifying and reducing the existence of hazards and risks in the workplace and in our system. As the Accountable Executive for all operations and activities, I will ensure that resources are available to ensure our SMS is robust and successful. Under my authority, the SMS Program is managed by the Chief Safety & Security Officer (CSSO), shall be a direct report to me and not serve in other operational or maintenance capacities.

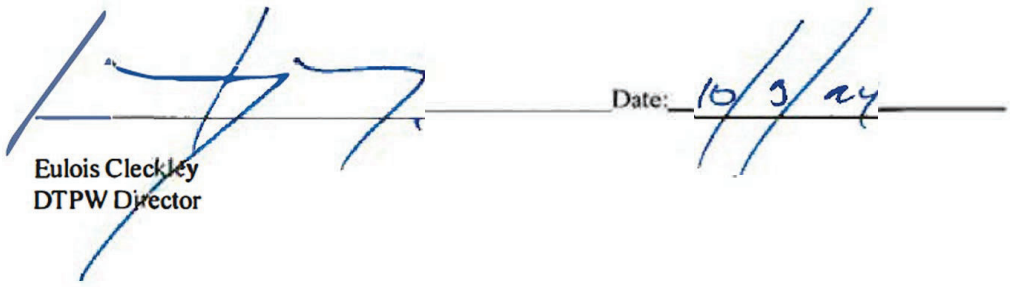
DTPW management will strive to take all appropriate steps to prevent workplace incidents, injuries, and illnesses and provide support to safety program initiatives. DTPW will also consider all employee suggestions for achieving a safer, healthier workplace; keep informed about workplace safety and health hazards, and regularly review the departmental safety and health program, which will be communicated via DTPW TransitNet and employee toolbox safety meetings.

DTPW supervisors are responsible for supervising and training workers in safe work practices. They are expected to enforce departmental safety rules and work to eliminate hazardous conditions. Supervisors will lead safety efforts by example.

All DTPW employees are expected and encouraged to participate in safety and health program activities including reporting hazards, unsafe work practices, near- miss incidents, and accidents, immediately to their supervisor or a safety committee representative. The DTPW Employee Safety Reporting Program allows all DTPW employees—including relevant contract employees—to report safety conditions to senior management, with specific protections, and resolution process. All employees will wear required personal protective equipment (PPE) and participate in, and support, safety activities. Employees will serve as safety ambassadors by working safely, complying with, all respective operating and safety requirements, and serving as an example to others.

Disciplinary action will not be taken against an employee who acts in good faith to prevent an injury or who reports any accident, incident, or hazard. All employees are required to abide by the standards and procedures set forth in this PTASP. Elements such as illegal activity, negligence, acts of willful misconduct, or undue care and attention shall be considered outside the scope of this policy.

Accountable Executive



Eulois Cleckley
DTPW Director

I 1.4 Executive Signatures

Following general requirements and guidelines from 49 CFR 674, in compliance with the Fixing America's Surface Transportation (FAST) Act, and to meet the FTA State Safety Oversight Standard, DTPW has developed a combined bus and rail Public Transit Agency Safety Plan (PTASP) as our governing system safety plan.

As DTPW Executives and Senior Leaders, we have reviewed and endorse the DTPW Public Transit Agency Safety Plan. We also understand that we have the authority and responsibility for day to day implementation and operation of DTPW's SMS.

Lydia Knight
Chief of Human Resources

Carlos De La Torre
Chief of Performance Analysis

Irene Hegedus
Chief of Transportation Enhancements

N/A
Vacant
Chief of Infrastructure & Maintenance

Melvin Cartagena
Chief Financial Officer

Joel Perez
Assistant Director of Bus Services

Scott Nicoll
Assistant Director of Rail Services

Lazaro R. Palenzuela
Chief of Quality Assurance

Eric J. Muntan
Chief of Office of Safety and Security

Josiel Ferrer-Diaz, P.E.
Chief Project Delivery Officer

Melissa Rolle-Scott
Chief Administrative Officer

Sean Adgerson
Chief Transit Operations Officer

I 2 Goals and Objectives

The Public Transit Agency Safety Plan (PTASP) establishes formal structure and processes to be used by DTPW to identify, assess, track, control, minimize, and resolve hazards associated with DTPW bus and rail systems. The PTASP will be used as a means of preventing injuries, incidents, system disruptions, accidents, environmental damage, and other losses. It demonstrates DTPW's commitment to safety and compliance through loss prevention programs. The plan is consistent with federal, state, and local regulations, and it sets forth procedures to comply with standards and conditions of industry and it complies with 49 CFR Part 674 and FDOT's Fixed Guideway Transportation Systems State Safety and Security Oversight Program Standard.

The PTASP applies to the planning, design, procurement, construction, activation, operations, and maintenance services of the bus and rail system. DTPW's Mission Statement is:

Mission: "Delivering excellent public services that address our community's needs and enhance our quality of life, now and in the future."

The DTPW Business Plan aligns to the Miami-Dade County Strategic Plan by providing a written overview of a department's core mission and specifying key departmental functions and activities that support the strategic plan, such as: priority initiatives that are ongoing or planned for the next fiscal year; internal and external factors that impact operations; customer needs and strategies to meet those needs; and drivers of the most important costs and revenues.

The DTPW Scorecard is used to manage the implementation of the DTPW Business Plan. Key scorecard elements include the department's objectives and performance measures that are most important to demonstrating success, including safety and security-related objectives/measures. In addition, performance measure targets reflect the levels required to achieve the outcomes linked to the Miami-Dade County Strategic Plan. Initiatives are tracked to monitor progress in specific projects required to meet the targets of DTPW's most important measures. DTPW management develops the safety culture, its elements and enhancement process, by reviewing on an annual basis, its measurable safety goals, as part of the DTPW Business Plan and Scorecard review process. The DTPW Performance Analysis Division coordinates the annual DTPW Business Plan and Scorecard updates.

In October 2016, the DTPW Performance Analysis Division (See also Section II 1.9 Safety Management System) began reporting on DTPW Office of Safety and Security performance measures, 3 of which are safety-related (employee injuries, bus preventable accidents), in the DTPW monthly Operations Report. This report and the DTPW Scorecard allow the DTPW Office of Safety and Security to monitor goal effectiveness, through documentation, of the safety-related goals on an annual basis.

In addition the DTPW PTASP will include the below specified DTPW annual safety objectives/measures are: (NTD represents the FTA's National Transit Database)

- Total NTD-reportable Fatalities for Metrorail-3, Metromover-2 & Metrobus-5
- Total NTD-reportable Fatality Rate per 1 Million Vehicle Revenue Miles for Metrorail-.33, Metromover-1.67 & Metrobus: .18
- Total NTD-reportable Injuries Metrorail-7, Metromover-2 & Metrobus-41
- Total NTD-reportable Injury Rate per 1 Million Vehicle Revenue Miles for Metrorail-.78, Metromover-1.64 & Metrobus-1.45
- Total NTD-reportable Events for Metrorail-14, Metromover-3 & Metrobus-27
- Total NTD-reportable Event Rate per 1 Million Vehicle Revenue Miles for Metrorail-1.56, Metromover-2.46 & Metrobus-.96
- Mean (or average) Distance Between major mechanical failures for Metrorail-39,000 miles Between Service Disruptions; Metromover-6,000 miles Between Failures; Metrobus-4,000 miles Between Failures.

I 2.1 Goals and Management Responsibilities

The goal of DTPW's PTASP is to utilize and achieve the highest practical level of safety in order to protect passengers, employees, emergency responders, contractors, visitors, and property. At a minimum, the PTASP ensures the following processes are incorporated into DTPW's system safety programs, plans, processes, and practices to achieve its goals to:

- Define the physical, functional, and operational characteristics of its transit system with its potential impact to people, equipment, infrastructure, facilities, and its operating environment.
- Identify hazards or undesired events by examining historical data, causes, and contributing factors.
- Provide a level of safety that is consistent with transit bus and rail standards.
- Assess risks by balancing the potential frequency of a hazard occurring against the severity of the event, and quantify the event into acceptable or unacceptable categories.
- Eliminate, mitigate, or control unacceptable or undesirable hazards to acceptable levels.
- Determine if DTPW's goals and objectives were achieved.
- Monitor hazard resolution effectiveness and determine if there are unexpected hazards.
- Comply with federal, state, and local rules and regulations.
- Continually improve and evaluate system safety design.

The CSSO is responsible for the development of goals for the PTASP and to report directly to the DTPW Director on compliance with the PTASP. The PTASP's intent is to:

- Establish a clearly defined safety structure with lines of authority and responsibility to implement the program, processes, and policies that integrates safety into all aspects of DTPW functions.
- Provide means of measuring and achieving DTPW safety goals and initiatives, and compliance with rules and regulations.
- Provide a comprehensive hazard management program to effectively identify and resolve issues.
- Set procedures for review, approval, and documentation of system modifications to existing systems, vehicles, facilities, and equipment.
- Set processes to address safety issues for activation of new systems and modifications to existing systems, facilities, and vehicles prior to initiation of service.
- Establish standards for emergency preparedness and management.
- Conduct continual internal audits, and inspections to evaluate PTASP compliance.
- Ensure compliance to safety rules and regulations that impact operations or maintenance.
- Conduct an ongoing maintenance inspections program of vehicles, equipment, facilities, and maintenance cycles, with documentation and the integration of identified safety concerns into the hazard management process.
- Set safety training standards for employees and contractors.
- Establish a configuration management control process for modifications during operations.
- Establish standards for and compliance with the hazardous materials program.
- Establish standards for and compliance with the drug and alcohol program.
- Establish standards for and compliance with procurement processes.

I 2.2 Corporate Safety Policies

Guided by the principles contained in this PTASP, the CSSO, under the direction of, and as approved by the DTPW Director, has developed specific corporate safety and loss control policies. These policies set the framework for guiding the safety program. All DTPW safety policies are available on the DTPW intranet.

I 2.3 Integrating Safety into all aspects of DTPW

The objective of safety at DTPW is the continual improvement of our processes and operations to maximize safety to the highest practicable level. This effort is undertaken by providing continual opportunities for employees to be reminded of safety, incorporate safe practices into their operations, and multiple means for each employee to identify potential hazards.

We accomplish this through "Safety First" messages at DTPW toolbox safety meetings, safety committee meetings, quarterly safety posters, identification and mitigation of hazards, proactive reviews and inspections to identify potential hazards.

Within the different DTPW divisions, multiple means of incorporating safety are presented. As examples:

- Safety participates in the Transit Oriented Development (TOD) meetings to identify and evaluate safety concerns.
- In new construction projects – safety is considered in Pre-Bid Construction Meetings, Pre-Construction Meetings, Construction Progress Meetings and Construction Punch List Meetings.
- Safety works with the DTPW Marketing Division for signs, vehicle wraps, handouts, wristbands, billboards, commercials and social media to maximize the safety message to the community.
- Safety is incorporated into DTPW divisional training programs, and conducts Roadway Worker Protection reviews; Safety Management System (SMS), Incident Command Structure training; and coordinates updates with operational Supervisory, and Managerial staff as well as the DTPW Executive Team.

SMS focuses on safety policy, formal hazard identification methods, continuous safety risk assessment, effective safety reporting systems, and targeted safety training. SMS provides the necessary organizational structures, accountabilities, policies, and procedures to optimally manage safety.

The SMS structure is based on four functional pillars for improved organization-wide safety performance: safety policy, safety risk management, safety assurance, and safety promotion. Figure 1 below illustrates the 4 SMS functional elements. The goal of SMS is to ensure that DTPW has a strategic decision-making process to proactively identify, prioritize, and control emerging safety risks before those risks become critical system failures.

Figure 1

Safety Policy — Establishes senior management's commitment to continually improve safety; defines the methods, processes, and organizational structure needed to meet safety goals.

Safety Risk Management (SRM) — Determines the need for, and adequacy of, new or revised risk controls based on the assessment of acceptable risk.

Safety Assurance (SA) — Evaluates the continued effectiveness of implemented risk control strategies; supports the identification of new hazards.

Safety Promotion — Includes training, communication, and other actions to create a positive safety culture within all levels of the workforce.

I 2.4 Definitions

Accident :	In accordance with 49 CFR Part 674, an event that involves any of the following: a loss of life; a report of a serious injury to a person; a collision involving a rail transit vehicle; 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.
Certifiable items list (CIL)	A DTPW-approved list of safety and security critical certifiable elements and sub-elements.
Corrective action plan (CAP):	A plan developed by the DTPW that describes the actions the transit agency will take to minimize, control, correct, or eliminate hazards, and the schedule for implementing those actions.
Event	Means, in accordance with 49 CFR Part 674, an Accident, Incident, or Occurrence.
Hazard:	Any real or potential condition that can cause injury, illness, or death; damage to or loss of a system, equipment or property; or damage to the environment.
Hazard management:	The process of identification and analysis of a hazard to mitigate, control, or accept it.
Incident	In accordance with 49 CFR Part 674, 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 rail transit agency.
National Transit Database (NTD):	An Internet-based system for reporting of incidents effective January 1, 2002, administered by the FTA at www.NTDProgram.com;.
Occurrence	An event where there is no personal injury, nor property damage that causes disruption to rail services. Such events include close calls, near misses, and vandalism/theft.
Passenger:	A person who is boarding, on board, or alighting from a transit vehicle for the purpose of travel.
Rail fixed guideway system (RFGS):	As determined by FTA, any light, heavy, or rapid rail system, monorail, inclined planer, funicular, trolley, or automated guideway not regulated by the
Rail transit controlled property:	A property that is used by the rail transit agency and may be owned, leased, or maintained by the rail transit agency.
Rail transit vehicle:	The rail transits agency's rolling stock, including, but not limited, to passenger or maintenance vehicles.
Revenue service operation:	Any transit service operation that is available for public use.
Risk:	An expression of possible loss over a specified period of time or number of operational cycles. It may be expressed as the product of hazard severity and
Rule:	The regulations, promulgated by the Federal Transit Administration, regarding the state safety oversight of rail fixed guideway systems. The 49 CFR Part 674
Safety:	Freedom from harm resulting from unintentional acts or circumstances.
Safety critical:	A term applied to any condition, event, operation, process, or item whose proper recognition, control, performance, or tolerance is essential to safe system
Safety management system:	A method of identifying hazards and controlling risks in a work and operational environment that continually monitors these methods for

Serious injury:	Serious injury means, in accordance with 49 CFR Part 674, 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 nose); 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.
State Safety Oversight Agency (SSOA):	State Safety Oversight Agency (SSOA) means the entity, other than the rail transit agency, designated by the state or several states to implement the safety and security oversight of rail transit agencies. In particular for this document, SSOA refers to the Florida Department of Transportation (FDOT).
System life cycle:	All phases of the system's life including design, research, development, test and evaluation, production, deployment (inventory), operations, support, and disposal.
FDOT Program Procedures and Standards	Program Procedures and Standards means a written document developed and adopted by the oversight agency (FDOT), that describes the policies, objectives, responsibilities, and procedures used to provide rail transit agency safety and security oversight.
System security plan (SSP):	Document describing the responsibilities and procedures for security of a system.

I 2.5 Acronyms

APTA: American Public Transportation Association

IRC: Incident Review Committee

SSCRC: Safety & Security Certification Committee

BSC: Bus Safety Management Committee

CAP: Corrective Action Plan

CRB: Change Review Board

CFR: Code of Federal Regulations

CIL: Certifiable Items List

OEM: Office of Emergency Management

CSSO: Chief Safety & Security Officer

DHS: Department of Homeland Security

EPP: Emergency Preparedness Plan

FAST: Fixing America's Surface Transportation

FHR: Final Hazard Rating

FLSTC: Fire Life Safety Technical Committee

FTA: Federal Transit Administration

IHR: Initial Hazard Rating

MAP-21: Moving Ahead for Progress in the 21st Century

MOC: Management of Change

NCR: Non Conformance Report

NRC: National Response Center

NTD: Nation Transit Database

NTSB: National Transportation Safety Board

OHA: Operational Hazard Analysis

PHA: Preliminary Hazard Analysis

QA: Quality Assurance

QC: Quality Control

RFGS: Rail Fixed Guideway System

RSC: Rail Safety Management Committee

SMS: Safety Management System

SOP: Standard Operating Procedure

SSCVR: Safety and Security Certificate Verification Report

SSO: State Safety Oversight

SEPP: Security Emergency Preparedness Plan

SSPP: System Safety Program Plan (replaced by PTASP)

PTASP: Transit Agency Safety Plan (replaces SSPP)

TSA: Transportation Safety Administration

TVA: Threat and Vulnerability Assessment

FDOT: Florida Department of Transportation

OSHA: Occupational Safety and Health Administration

DTPW: Department of Transportation and Public Works

I 3 Overview of Management Structure

I 3.1 Miami-Dade County Board of County Commissioners and DTPW Executive Staff

In 1960, the Miami-Dade County Commission passed an ordinance creating the Metropolitan Transit Authority (MTA) to unify the different transit operations into one countywide service. This ordinance provided for the purchase, development, and operation of an adequate mass transit system by the County. These companies included the Miami Transit Company, Miami Beach Railway Company, South Miami Coach Lines, and Keys Transit Company on Key Biscayne and would be managed by National City Management Company. Over the years and under various administrations, MTA evolved into the Metro-Dade Transportation Administration, the Metro-Dade Transit Agency, the Miami-Dade Transit Agency, Miami-Dade Transit and is now known as the Department of Transportation and Public Works (DTPW). DTPW is a Department of Miami-Dade County (MDC). MDC is governed by an Executive Mayor, elected countywide, and a Board of County Commissioners (BCC), elected by districts (13). The BCC shall approve this PTASP and designate/authorize the DTPW Director as the Accountable Executive who shall execute and deliver the PTASP on behalf of DTPW. The DTPW Director reports to the Miami-Dade County Mayor. The Miami-Dade County table of organization is found in Appendix A.

The DTPW Director has full charge of the acquisition, construction, maintenance, and operations of the system and facilities of DTPW, and of the administration of DTPW business affairs. The Director supervises an executive staff of Deputy Directors, Assistant Directors and Divisional Chiefs. Included in these executive positions, the Deputy Director of Operations is responsible for bus and rail transit operations in accordance with the direction, goals, and policies of DTPW. The CSSO has responsibility for departmental safety. The DTPW table of organization is found in Appendix B. Per 49 CFR 673, the CSSO reports directly to the DTPW Director, and attends executive staff meetings.

The Miami-Dade Transportation Planning Organization (TPO) Governing Board approves federally required plans and transportation policies. The development of transportation plans and programs is coordinated through the Transportation Planning Council (TPC) which makes recommendations to the TPO Governing Board. The TPC is responsible for the overall technical adequacy of the TPO planning program and advises the TPO Governing Board on the various proposed program actions. The TPC has ultimate responsibility for the technical adequacy of the various products that are transmitted to the TPO Governing Board for acceptance and adoption. The TPC was created in 1978 by the TPO Governing Board to serve as their primary intergovernmental advisory body and to provide technical guidance with the support of its subcommittees. The TPC relies on three standing committees concerned with major products of the transportation planning program. These committees are:

- Long Range Transportation Plan (LRTP) Steering Committee
- Transportation Improvement Program (TIP) Development Committee
- Transportation Planning Technical Advisory Committee (TPTAC)

The TPC usually meets the second Monday of each month, at 2 p.m. in the Stephen P. Clark Center, 111 NW 1ST Street. The TPC is chaired by the TPO Executive Director and Council members are directors of county and municipal departments (incl. DTPW) and agencies involved in the transportation planning process. As such, DTPW coordinates safety performance targets, as needed, at the TPC meetings.

DTPW Executive Management Structure

I 3.2 Management—Key Role in Safety

DTPW's safety program is implemented by Rail and Bus Services managers. Safe operations of bus and rail units are the responsibility of the divisional general superintendents (GS).

Each operating division has an appointed GS, who along with managers and supervisors is responsible for implementing policies and procedures for safe operations. The General Superintendents of the rail and bus units have charged their management teams to effectively manage safety, and to develop safety programs, plans, procedures, training, policies, and rules to govern safety and to fully comply with the PTASP. Bus and rail maintenance facilities are staffed with a manager of maintenance responsible for the safe operation of the facility,

and are supported by shift supervisors and maintenance workers during their performance of maintenance, servicing, and inspection.

Supervisors' responsibilities place them at the forefront of DTPW's rail and bus services safety efforts. A significant portion of their duty is to serve as frontline safety officers; monitoring, ensuring, and emphasizing safety performance, rules compliance, and promoting a strong safety climate. All employees are charged with adhering to safety, but supervisors are DTPW's key to improved safety-related behavior, and positive safety outcomes. Supervisors have the responsibility to monitor safety compliance of their employees and ascertain that employees understand their job functions and the safety requirements of that job.

DTPW safety compliance is managed starting at the lowest levels. Employees identified in the Rail and Bus Training Manuals are trained in safety, job duties, and given responsibility for their own safety and the safety of those with whom he/she works. All employees have the authority to halt an operation if it is deemed to be unsafe. DTPW's system safety processes emphasize open and fair dialog between leaders and subordinates to increase the commitment to safety at all levels.

In an oversight role, safety personnel (safety supervisors and safety officers) report to the manager of safety who reports to the CSSO. Safety personnel have a role in executing the functions necessary to ensure safety, to include the following:

a. Coordinate safety activities of the agency.
b. Compile safety data and perform analysis to identify and assess operational risk.
Assist in the investigation of accidents and incidents as appropriate.
d. Review maintenance records to identify safety problems related to maintenance activities.
e. Evaluate hazard resolutions proposed by departments.
f. Perform analysis to identify and resolve hazards.
g. Evaluate proposed system modifications from a safety perspective.
h. Conduct safety audits, reviews, and inspections.
i. Provide safety support, as needed.

The DTPW Office of Safety & Security Division (OSS) will conduct regularly scheduled internal safety audits to evaluate compliance and conformance with DTPW's PTASP, FDOT-SSO Program Standard, and 49 CFR 673. Safety personnel serve as alternates to each other. Safety personnel work closely with management and employees, through various processes and committees, and have authority to determine compliance. The corrective action plan (CAPs) process shall be in accordance with OSS SOP PR SS-003 Internal Safety & Security Corrective Action Plan Procedure. Safety personnel are the designated contacts to regulatory agencies, and serve as alternate contacts to the FDOT-SSO oversight agency.

I 3.3 Management —Public Transit Agency Safety Plan (PTASP)

DTPW's Director, having authorized and endorsed the program and resulting plans, processes and procedures, has delegated the responsibility to update and implement DTPW's PTASP to the CSSO. The OSS is responsible for overseeing the writing and development of the PTASP, to conduct annual updates and revisions, as necessary, and to disseminate the PTASP document in accordance with the FDOT SSO Program Standard, and 49 CFR 673, General Requirements.

The PTASP is reviewed with and distributed to the DTPW Director, Deputy Directors, Assistant Directors, General Superintendents, and Divisional Chiefs who comprise the DTPW Executive staff. In addition to the above distribution, the PTASP is also made available to all DTPW employees on the agency intranet. Old versions of the SSPP/PTASP will be removed and replaced with latest approved PTASP as they are made available. This process will be initiated and supervised under the direction of the Safety Manager.

The Safety Computer Drive on the OSS's network is used for the purpose of storing and tracking past and current safety sensitive information and documents; including the PTASP, incident reports, CAPs, hazard logs, inspections, audits etc. The Y: drive is a secured drive and only accessible to safety division and designated personnel. Current Data and reports are maintained and kept by the safety division and can be reviewed by the SSO Manager at any time.

I 3.4 Metrorail Service

Metrorail, which began service in June 1984, is an elevated rapid transit system stretching from Kendall, in the south, to Medley in the north (see Figure 3). A customer can travel from one end of the system to the other in approximately 45 minutes. There are 23 stations located on the 25-mile double track, single line, electrically powered system, which operates approximately 20 hours a day. Metrorail connects the following municipalities: Hialeah, Miami, Coral Gables and South Miami. Future development of the rail system identifies several extensions to the current line, and the construction of additional rail lines. In an average year, Metrorail trains carry more than 20 million passengers. Trains operate in married pairs of 4-car or 6-car consists.

The right-of-way is aligned, from its southern terminus, northeast, approximately 10 miles, to the Miami River crossing and the downtown center of the City of Miami. From there, it is approximately 10 miles, northwest, to the end of the line at the Palmetto Metrorail Station in Medley. The Miami International Airport Station (MIA) is located about 2.4 miles southwest of the Earlington Heights Metrorail Station. There are twenty-two passenger stations located on the elevated guideway and one located at grade level.

The Government Center Station in Miami is the interchange station with the 4.4 mile elevated Metromover system and is designed for a future east-west expansion of the rail system. The Tri-Rail Station is the interchange station with the Tri-County Commuter Rail System, which serves Miami-Dade, Broward and Palm Beach Counties. The Brickell Station is also an interchange station for the Metromover system. The Dadeland South Station is an interchange station for the US1 Exclusive Bus Lanes Corridor. The Metrorail system map is found in Appendix C.

Since the opening of the Miami International Airport Station (MIA), on June 28, 2012, Metrorail trains run from Dadeland South Metrorail station to either the MIA Metrorail Station (Orange Line) or the Palmetto Metrorail Station (Green Line). Trains serving the new MIA Metrorail Station are designated ORANGE LINE. Trains serving the Metrorail line between Dadeland South and Palmetto Stations are designated GREEN LINE.

Traction Power (700 Volts, DC), supplied by 23 substations, is provided to the vehicles through a power (third) rail. There are 136 cars in the fleet. Trains may operate to a maximum speed of 70 miles per hour at 3 minute headways.

The Lehman Center Yard and Shops at the northern terminus of the right-of-way includes facilities to test, repair, maintain, clean and store vehicles and equipment and to support the maintenance of the system. At the southern terminus "tail tracks", light maintenance, cleaning and storage can be performed. Crossover tracks, storage tracks and pocket tracks are situated at suitable locations to enable trains to turn back at both ends of the corridor and at selected midline locations.

In March 2017, the first two new rail cars of the all new DTPW fleet, arrived at the Lehman Center Maintenance Facility. The first phase of testing was conducted at the Hitachi Rail Facility in Medley, Florida, where the vehicles were constructed. The first married pair underwent more in-depth testing at DTPW's test track. While at Lehman Center, the new vehicles underwent a new set of qualification testing to ensure their compatibility with the infrastructure of the existing system. This included: testing of the braking and propulsion systems; wayside integration; coupling and uncoupling; and WiFi. System level tests for ride quality, electromagnetic interference, rail and station interface, and noise/vibration.

The additional vehicles were assembled and delivered to Lehman Center on a monthly schedule. They were continuously placed into passenger service accordingly. The full fleet of new rail cars (136 total) have been assembled, tested, and placed into passenger service.

I 3.5 Metromover Service

Metromover originally began service to the Miami Central Business District (MCBD) in April 1986. It was an elevated, electrically powered, fully automated people-mover system connecting with Metrorail at Government Center, and with Metrobus at various locations throughout downtown Miami. The Metromover system map is found in Appendix D.

In June 1994, the Omni and Brickell Extensions were constructed which added 2.5 miles to the original 1.9-mile guideway. Additionally, 12 new stations were added to increase the number of stations to 21, and 17 additional vehicles were purchased, bringing the fleet total to 29. The new system provided a connection with Metrorail at

Brickell Station, in addition to the existing Metrorail connection at Government Center. The Metromover system is a fully automated people mover system operating in the Downtown area of Miami. The Metromover system interfaces with both the Metrorail and Metrobus systems to provide improved circulation in the Central Business District. Metromover vehicles operate as a single, but can be married into a 2-car pair. In an average year, Metromover vehicles carry more than 9.5 million passengers.

In 2008 and early 2009, 12 new Metromover vehicles were added to the fleet to replace the original 12 Metromover vehicles. Among the improvements are: the addition of single unit Heating, ventilating, and air conditioning (HVAC) system and Closed-Circuit Television (CCTV) with Digital Video Recorders (DVR) for all vehicles. DTPW purchased 17 additional Metromover vehicles to replace the 17, Stage 2 (1994) Metromover vehicles. Eight vehicles, in 2011, and nine vehicles, in 2012, were delivered and safety certified.

The twenty-nine Metromover vehicles have rubber tires that roll on concrete strips or running pad (pads). The pads are cast on steel girder flanges supported by piers and underground reinforcement, all of which constitute the system guideway. The vehicles are regulated by an automatic processor-controlled train control system for routing, speed, precision stopping, door operation and acceleration. Operations are overseen by personnel at the Central Control Facility.

Each train operates without manual intervention (unmanned). The Metromover maintenance facility is located under the Metrorail guideway, south of Government Center station. Once dispatched from the departure tracks in the Maintenance Facility area, each vehicle will follow the wayside speed commands, in automatic mode and safely traverse either loop and/or extension.

The maintenance program for Metromover is similar to that for Metrorail, with two principle exceptions: the use of concrete running pads in lieu of steel rails, and an advanced train control system to support automated system operation. Maintenance of the train control system is based on the Original Equipment Manufacturer's (OEM) recommendations/specifications.

I 3.6 Bus Service

Metrobus service began operating under the (MTA) Metro Transit Authority in 1962. The Coral Gables Transit System merged with the County in 1975. The South Dade Transitway (originally named the South Dade Busway) is a basic bus rapid transit system, in southern Miami-Dade County. It began operating from the Dadeland South Metrorail station to SW 112th Avenue in 1997 and was extended to SW 264th Street in 2005. The final 6.5-mile segment of the Busway extension to SW 344th Street opened in 2007.

Metrobus has three division facilities in which operations, administration, and maintenance activities are housed: Northeast, Central and Coral Way. General repairs and maintenance are performed at all locations. The major overhaul facility is located at Central. Tires are maintained by a contractor to meet or exceed state requirements. Approximately 1,742 miles of public highway throughout Miami-Dade County support transit services. Routes are modified periodically to adapt to changing needs. The Metrobus system map is found in Appendix E. The Metrobus Traffic Control Facility is currently located on the 5th Floor, Stephen P. Clark Center building (111 NW 1st Street, Miami, FL 33128).

Technical specifications for the DTPW Passenger Transit Coaches incorporate power plant, fuel system and emission system features for coaches in the DTPW bus fleet. Privately owned and operated contractor-provider facilities are subject to periodic inspections/audits by the DTPW OSS. The contractor- providers must also operate in accordance with Federal Laws and State Rules andStatutes, including FDOT Rule 14-90.

On June 4, 2021, Miami-Dade County officially broke ground on the all-new South Dade Rapid Transit Project. The South Dade Transitway (South Corridor) will be one of the rapid transit corridors of the Strategic Miami Area Rapid Transit (SMART} Program. The South Dade Transitway will run 20-miles in length and connect numerous municipalities representing some of the fastest growing communities in Miami-Dade County. It will extend from the Dadeland South Metrorail Station to the SW 344th Street Park-and-Ride/Transit Terminal. The Corridor will provide a mobility connection between the Miami Central Business District and the Village of Pinecrest, the Village of Palmetto Bay, Town of Cutler Bay, City of Homestead, and Florida City. The South Dade Transitway will consist of fourteen (14) state-of-the-art covered shelters with 24-hour on-site security, CCTV equipment, law enforcement monitoring, and dedicated roving contracted security supervisors.

Once completed, the South Dade Rapid Transit Project will undergo safety and security certification (similar to rail system extensions) and the $100 million BRT will provide rail-like travel time, iconic stations, level boarding through all doors, and pre-paid fares for speedy access. BRT will also provide enhanced safety features and other upgrades along dedicated lanes with multi-layered service lines on the South Dade Transitway. Construction on the South Dade Transitway is expected to be completed by the Fall of 2024.

The bus fleet supporting revenue service consists of the following:

	# OF VEHICLES
NABI 05100 DIESEL	1
NABI 06100 DIESEL	10
NABI 09100 HYBRID	4
GILLIG 14100 HYBRID (14101-14130)	28
GILLIG 14100 DIESEL (14131-14135)	5
NABI 15100 DIESEL (15101-15115)	15
GILLIG 16100 DIESEL (16101-16105)	5
NEWFL 18100 CNG (18101-18269)	168
NEWFL 19100 CNG (19101-19231)	129
GILLIG 19200 CNG (19232-19265)	34
GILLIG 20100 CNG (20101-20186)	86
NEWFL 20100 CNG (20187-20238)	52
NEWFL 21100 CNG (21101-21188)	87
PROTERRA 22100 ELE (21189-22174)	69
NABI 15500 HYBRID (15501-15543)	38
NEWFL 16500 HYBRID (16501-16511)	8
NEWFL 17500 HYBRID (17501-17510)	9
GILLIG 12300 DIESEL (12301-12303)	2
TOTAL ACTIVE FLEET	**750**

DTPW has implemented new clean diesel technologies such as diesel-electric hybrid propulsion and electrification of bus systems that reduce fuel consumption and emissions. DTPW has contracted for 3 compressed natural gas (CNG) fueling stations and has taken delivery of 560 natural gas fueled buses. The Central and Coral Way fueling station are fed by an underground 6-inch natural gas pipeline operating at 200 pounds per square inch pressure, were fully completed mid-year 2021. DTPW is using a temporary fueling system at the Northeast Bus garage until the permanent fueling station which is projected to be complete in mid-2025. Through the use of funds secured by way of the American Recovery and Reinvestment Act (ARRA), DTPW planned the following bus purchases for the following Miami-Dade County municipalities:

a) For the **City of Coral Gables**: 1 thirty foot, low-floor trolley.
b) For the **City of Homestead:** 1 twenty-seven foot trolley bus.
c) For the **City of Miami Beach**: 2 thirty foot, low-floor buses.
d) For the **City of Miami**: 19, twenty-seven foot trolley buses.
e) For the **Town of Cutler Bay**: 1 thirty foot, mini-bus.
f) For the **City of Hialeah**: 8 low-floor buses.
g) For the **City of Sunny Isles Beach**: 2 thirty foot, cutaway, shuttle buses.

On an annual basis, the DTPW OSS audits each municipality, using a checklist with all FDOT Rule 14-90 requirements, to ensure that each municipal service has a current SSPP, SEPP and a certification on file with DTPW. Metrobus revenue service is provided on 70 routes which 13 of them are subcontracted:

- Limousines of South Florida d/b/a Transportation America (TA) operates 11 routes (Route #s 2, 15, 56, 70, 72, 97, 152, 272, 344, 401, 510).

- Safeguard America, Inc. d/b/a America's Transportation (AT) operates 2 routes (Route #s 301, 302).
- DTPW also operates 6 Life Lines that serves elderly homes: Green Hills, Kings Creek, Seaira Lakes, Robert Shar, Ahepa & Federation Gardens.

In an average year, Metrobus provides over 58 million passenger trips. Revenue service is available 24 hours per day on specified routes. DTPW bus routes include a number of express services which operate on limited access highways, the Busway and are served by (automobile) park and ride facilities. At certain northern service points, the DTPW routes interchange with the Broward County bus system.

DTPW has contracts in place with outside vendors to provide transportation services for a wide range of community needs, such as Special Transportation Services (STS) or Paratransit, on-demand semi fixed-route services (charters, emergency evacuations), limited schedule, and fixed-route service (Card Sound Express & Dade-Monroe Express). On an annual basis, the DTPW OSS audits all contracted providers, using a checklist with all FDOT Rule 14-90 requirements, to ensure that each Contractor-Provider/Paratransit service has a current SSPP, SEPP and a certification on file with DTPW. Special Transportation Service (STS) is a shared-ride public transportation service of Miami-Dade County in compliance with the complementary paratransit service provisions of the Americans with Disabilities Act (ADA) of 1990. STS offers door-to-door transportation service from the main entrance of pick-up to the main entrance of drop-off locations. The service operates 24 hours a day, 7 days a week and can be used throughout Miami-Dade County for work, school, shopping, recreation and medical appointments. A variety of cars and vans comprise the Paratransit service fleet.

Special transit services are provided by all modes, such as extended service hours for major events. Special Operational Plans may be developed by ad hoc committees, for major events, to ensure efficient and safe service. The transit systems will operate, as required, to provide evacuation and other emergency service in the event of natural (hurricane) or man-made (nuclear) disasters.

I 3.7 Climate / Geography

Miami and its suburbs are located on a broad plain between the Florida Everglades to the west and Biscayne Bay to the east, which also extends from Florida Bay north to Lake Okeechobee. The elevation of the area never rises above 40 ft (12 m) and averages at around 6 ft (1.8 m) above mean sea level in most neighborhoods, especially near the coast. The main portion of the city lies on the shores of Biscayne Bay which contains several hundred natural and artificially created barrier islands, the largest of which contains Miami Beach and South Beach. The Gulf Stream, a warm ocean current, runs northward just 15 miles (24 km) off the coast, allowing the city's climate to stay warm and mild all year.

Miami has a tropical monsoon climate with a marked drier season in the winter. The wet season begins some time in June, ending in mid-October. During this period, temperatures are in the mid 80s to low 90s (29–35 °C), accompanied by high humidity, though the heat is often relieved by afternoon thunderstorms or a sea breeze that develops off the Atlantic Ocean, which then allow lower temperatures. Much of the year's 61.9 inches (1,572 mm) of rainfall occurs during this period. Hurricane season officially runs from June 1 through November 30, although hurricanes can develop beyond those dates. Although tornadoes are uncommon in the area. Around 40% of homes in Miami are built upon floodplains and are considered as flood-risk zones.[51]

I 3.8 DTPW Organizational Chart

The DTPW organizational chart, Appendix B, focuses on the roles of Department managers and OSS, showing the management structure and process available to report directly to DTPW's Director.

I 4 PTASP Annual Updates, Revisions, and Changes

I 4.1 Written Plans

The PTASP and the Security Emergency Preparedness Plan (SEPP) will be reviewed annually and modified, when necessary, to reflect changes in the system equipment, facilities, procedures or organization, on or before February 15, as per the following Section I 4.2 of this Plan (PTASP Annual Update Process). Prior to final approval, the modified PTASP submitted to the FDOT SSO for approval and acceptance in accordance with FDOT's Fixed Guideway Transportation Systems State Safety and Security Oversight Program Standard. The plans may also be revised when, as needed, the CSSO. The PTASP, and subsequent updates, will be signed by the Accountable Executive and approved by the Miami-Dade County Board of County Commissioners.
The PTASP documents the processes and activities related to Safety Management System (SMS) implementation, and includes performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. Other key processes and procedures required to carry out SMS are coordinated by the DTPW Document Management Unit (DMU) by implementing the Electronic Document Management System (EDMS) to establish a process to provide a consistent method of accessing online documentation, thus enhancing document retrieval, and safeguarding the retention of critical documents. By February 15 of each year, the DTPW will submit an annual report to FDOT that includes documentation of the internal reviews conducted during the previous year. This annual report will include:

- A list of the internal safety and security reviews conducted for that year;
- A discussion of the FGTS status in meeting its three-year internal audit schedule, including the identification of any obstacles in meeting the schedule and any proposed mitigation measures;
- An updated schedule for the following year review;
- The status of all findings, recommendations and corrective actions resulting from the reviews conducted that year; and
- Any challenges or issues experienced by the FGTS in obtaining action from/compliance with these findings, recommendations and corrective actions during that year.

The annual report will include a formal letter of certification, signed by the accountable executive of the FGTS, stating that, based on the evaluation performed during the internal safety and security review process during the previous year, the DTPW is in compliance with its PTASP and SEPP.

FDOT SSO may request, in writing, modification to the plans due to audit reports, on-site reviews or, investigations. DTPW will be given at least 30 days to address any requested changes. Once FDOT has approved the revised plans, DTPW will transmit a signed copy of the plans to FDOT SSO in an unalterable electronic format.

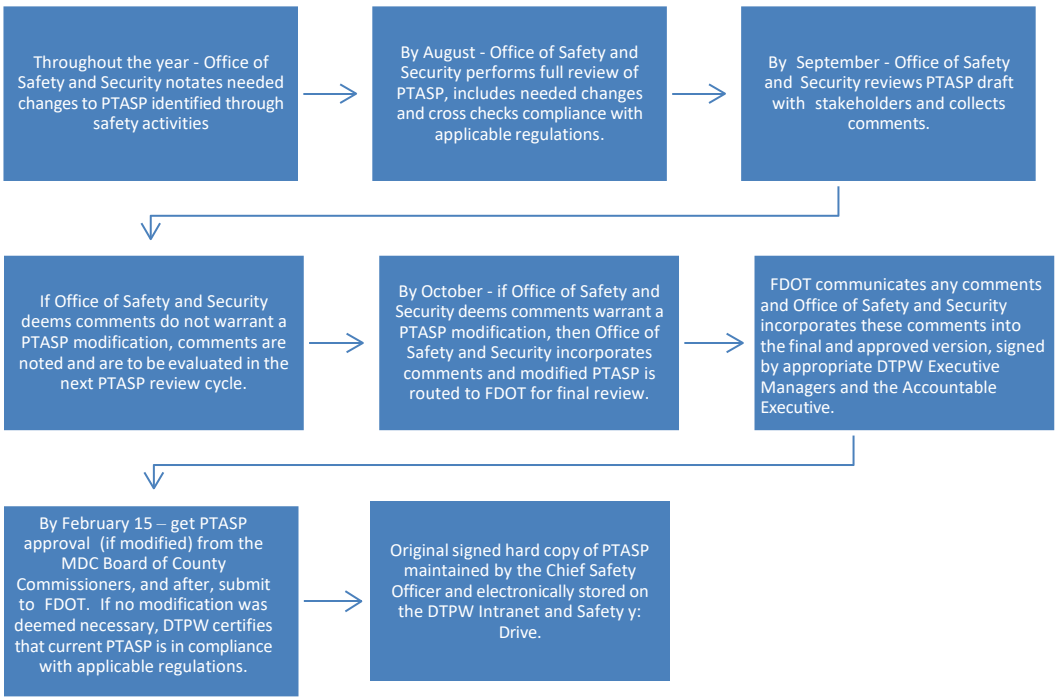
The Miami-Dade County Office of Emergency Management issues a Comprehensive Emergency Management Plan (CEMP) for use by every County Department. DTPW specific responsibilities and activities are described in the CEMP as it relates to County emergency response.

DTPW's CSSO is accountable to senior management for the accuracy and timeliness of all PTASP and SEPP updates, approvals, and distribution to FDOT. DTPW's Safety and Security Division will coordinate with FDOT-SSO to develop, review, update and distribute the plans. DTPW's Safety and Security Division is responsible for evaluating compliance and or deficiencies with DTPW's safety emergency preparedness programs, FDOT-SSO program, 49 CFR 673 general requirements, as applicable.

The DTPW *Security Emergency Preparedness Plan* (SEPP) details the security program for DTPW. This plan describes the system security and the threat and vulnerability management process employed by DTPW. This plan also details how state and local law enforcement agencies work together to provide for a secure system. Involvement of DTPW security personnel and local law enforcement personnel is essential for a strong cooperative security effort. The plans are controlled documents that are applicable to all DTPW employees and contractors. The current PTASP is available on the intranet and is updated as new versions are made available. (Note: The

SEPP is notdistributed as it is a security sensitive document and is protected under 5 U.S.C. 552 and 49 CFR Parts 15 and1520.)

I 4.2 PTASP Annual Update Process



I 4.3 Emergency Management

The Miami-Dade Office of Emergency Management (OEM) undertakes a constant, year-round approach in preparing a response, recovery, and mitigation effort. Aside from developing and maintaining a local Comprehensive Emergency Management Plan (CEMP), OEM Coordinators and Planners engage in numerous training sessions dealing with hurricanes, radiological emergencies, hazardous material emergencies, and mass casualty incidents. OEM policy I-2 identifies the minimum training requirements for OEM staff and identifies the timeframe in which trainings must be completed. OEM Emergency Support Function (ESF) 1 (Transportation) provides and coordinates emergency transportation resources and services during an emergency or disaster in the county. DTPW is the lead agency for ESF 1, which is included in the **Pandemic Influenza Preparedness and Response Plan for Miami-Dade County** issued by the Miami-Dade County Health Department on June 22, 2007.

As of June 2007, the Miami-Dade County Health Department assumed all countywide responsibilities for planning, mobilizing and managing health and medical services during the response and recovery phases of a disaster. In addition, DTPW has developed and implemented a Pandemic Plan which is attached as an Appendix to DTPW Continuity of Operations Plan (COOP). The primary goal of the COOP is to provide a comprehensive approach for managing emergencies and events, including prevention/mitigation, preparedness, response, and recovery. The plan addresses emergencies due to criminal activity, hurricane, fire, flooding, hazardous materials spills, medical emergency, severe weather, telecommunications, or computer system failures, terrorism, transportation accidents, utility outages, health (pandemics) or other emergency situations occurring within the transit system and its related buildings. The plan also addresses anticipated, planned events that require a special response from DTPW such as the disruption of bus or rail service. DTPW OSS also maintains a Hurricane Manual, Radiological Response Plan and Mass Migration Response Plan to address specific emergency situations.

As part of the DTPW COOP plan, the health emergency section will outline processes and procedures associated

with incidents affecting the health and well-being of department employees. It is the goal of DTPW to provide safe transportation to the public as well as to protect DTPW employees, property, and facilities from harm that may occur as a result of natural or man-made emergencies or events. Accordingly, a DTPW COOP Plan was developed and shall be practiced, implemented and updated as needed.

Health emergencies may present unique circumstances that require only certain components of the COOP, such as Personnel Management, to be implemented. These type of emergencies can present increased employee absenteeism (i.e. influenza), prompt social distancing as a preventative measure (i.e. pandemic), or other alternative workplace issues that may require the enactment of this COOP plan. In addition, the DTPW will incorporate mitigation strategies related to exposure to infectious diseases by DTPW employees through the Safety Risk Management process described in the PTASP. The DTPW may also seek guidance on strategies from official entities such as the Center for Disease Control (CDC) and/or other local bodies which provide guidance to Miami-Dade County.

Personal protective equipment (PPE) may be utilized based on the type and severity of the health emergency and its use varies based on the setting of the employees, i.e., general office, hospital, health care provider setting, etc. Adhere to guidance and recommendations given by public health officials at the time of the health emergency. PPE items can include some or all of the items below:

- OSHA approved disposable facemasks, surgical masks, N95 respirators
- Gloves
- Alcohol based hand-sanitizer (individual units or sanitizer stations)
- Antibacterial surface wipes or sprays

The OEM Training and Exercise Coordinator is responsible for performing periodic needs assessments to coordinate the training of all Miami-Dade Emergency Management personnel. County and municipal agencies that perform roles during emergencies and disasters will also receive adequate training. OEM is responsible for providing community education to Miami-Dade County organizations and citizens.

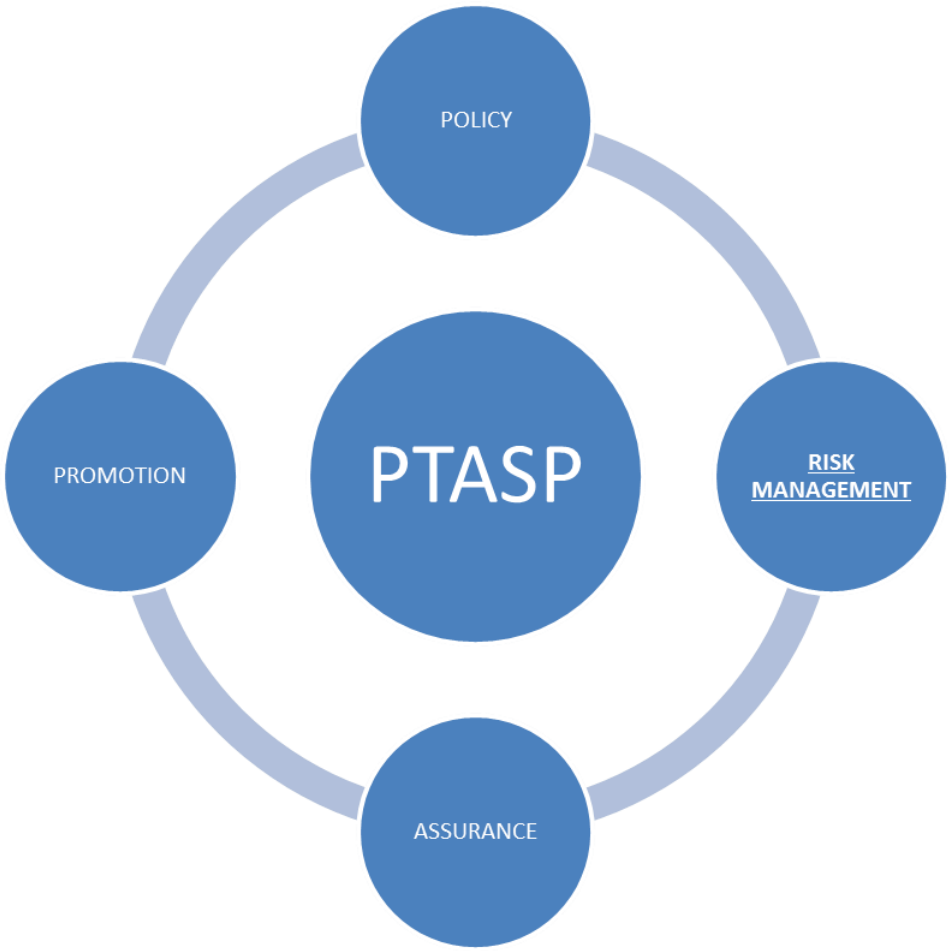
The training programs currently in place cover those topics that must be understood by all OEM staff and all other personnel of county and municipal agencies serving a policy or coordination role in emergencies and disasters. These programs are divided into 2 categories developed by: 1. State/Federal; and 2. Miami-Dade OEM.

The agencies that participate in these programs vary by type of exercise. Generally, there are agencies that will be exercised more frequently than others depending on the aspects being examined. Agencies most likely to be represented include: OEM; Law Enforcement; Fire Rescue; Miami-Dade Health Dept.; Transit Agencies; American Red Cross.

DTPW Fire Life Safety Technical Committee meetings are conducted, as needed, to develop and adhere to emergency procedures and operational procedures to ensure all fire/life safety related equipment, procedures and practices are in proper order. Additionally, fire/life safety concerns, for all life cycle phases of DTPW Metrorail, Metromover, Metrobus, and Special Transportation Services Operations are addressed. The Committee has a total of twelve (12) members that include the DTPW General Superintendent, Rail Vehicle Maintenance, Chief of Infrastructure and Maintenance and the Chief, Transit Design Engineering as well as the Chairperson. Committee members represent DTPW in the planning and coordinating of emergency activities at these meetings. Emergency response organizations are informed of the rail system and important fire/life safety features. These meetings provide an informational forum and interface to address emergency concerns. Meetings with external agencies are coordinated for training, information, exercising, and to provide familiarization training for local first responders. Other Committee functions are described in the Transit Administrative Policy (TAP) POL-SS-014, Fire Life Safety Technical Committee.

The DTPW SEPP contains an Incident Management Plan section that outlines a comprehensive approach for managing emergencies and events, including prevention/mitigation, preparedness, response and recovery. This plan uses the same reporting relationships as the DTPW Hurricane Plan to respond to local and regional incidents.

II. RISK MANAGEMENT



II RISK MANAGEMENT

Pillar II of the Public Transit Agency Safety Plan is **Risk Management**, describing how DTPW identifies, evaluates, tracks, and mitigates hazards and risk in the organization and on the transit system. In this pillar, the processes undertaken by the agency are provided in sufficient detail to be effectively achieved. Acceptable risk levels, performance targets, and mitigation measures are established.

II 1 Risk Management Program

II 1.1 Hazard Management

The management of identified hazards is a vital component of the DTPW Safety Management System. A hazard is defined as a condition or set of conditions, internal or external to the DTPW system, which, when activated, could cause injury or death or damage or loss of equipment or property. An unacceptable hazard is a condition that may endanger human life or property or result in system loss. This includes harm to passengers, employees, contractors, equipment, and to the general public. These hazardous conditions must be mitigated. Hazards are identified in several different internal and external sources. Hazards may be observed in the operating environment, through procedures, during system modifications and capital projects, accidents, extensions or operational changes.

It is the responsibility of all DTPW employees to constantly observe hazards in their work areas and report them to the Union-Management Safety Committee, the OSS, or to their supervisor or manager. The DTPW hazard management program incorporates a system-wide hazard identification process, including activities for:

a. Identification
b. Investigation
c. Evaluation and analysis
d. Mitigation or elimination
e. Tracking
f. Ongoing reporting to FDOT SSO and DTPW executive staff relating to hazard management activities and status

II 1.1.1 Employee Safety Reporting System

It is the policy of DTPW to provide a safe work place for all employees. Any employee that has a concern regarding an unsafe condition, procedure or practice, should bring this matter to the attention of his/her immediate supervisor by using the DTPW Report of Safety Concern Form and/or the Transit Net online Safety Concern reporting system, which can be completed anonymously. It is the responsibility of each employee to report health and safety concerns which affect them or which affect other employees. These concerns are not limited to the personal workspace of the employee, but can include any health and safety concern on the DTPW system. The DTPW policies/procedures specified below, provide DTPW's employees with the process for the resolution of safety concerns at all levels of escalation.

- DTPW Standard Operating Procedure (SOP) PR SS-004, Report of Safety Concern Procedure
- DTPW SOP PR RS-032 Rail Services On-Track Safety Good Faith Challenge Policy

Additionally, OSS conveys information on hazards and safety risks relevant to employees' roles/responsibilities via the DTPW Union-Management Safety Committee and the Rail & Bus Monthly Safety Management meetings. Disciplinary action will not be taken against an employee who acts in good faith to prevent an injury or who reports any accident, incident, or hazard. Employee behaviors that may result in disciplinary action are covered in DTPW TAP POL CL-003 Disciplinary Action Policy. In accordance with the Moving Ahead for Progress in the 21st Century Act ("MAP-21" – the federal transportation authorization signed into law on July 6, 2012), DTPW has developed its first Transportation Asset Management Plan (TAMP, approved June 2018) . The TAMP is a collaborative effort, guided by the Agency's Senior Leadership, County Subject Matter Experts (SME), DTPW Division of Operations and Maintenance - as the business liaisons for the Asset Management Program, to establish the requirements for managing transit assets as mandated by the Federal Transit Administration (FTA). It identifies and analyzes processes needed for decision-making where the use of limited funding can be applied for the most

critical State of Good Repair (SGR) projects. DTPW seeks to improve its stewardship over its physical assets, identify risks, reduce maintenance and life-cycle costs, make better informed capital investment decisions and enhance quality of service by implementing the procedures and tools identified for this asset management plan.

Using the TAMP as a guide, DTPW will more thoroughly analyze life-cycle costs, evaluate risks, develop a risk matrix, develop mitigation strategies, establish asset condition performance measures and targets, and recommend investment strategies. The TAMP will also provide for a more robust accounting of all DTPW's assets and their condition; quantify the level of funding required to optimize life-cycle assets over time; demonstrate the benefits and costs associated with investment decisions; and make more informed resource allocation decisions linked to overall goals which are understood and supported by the entire organization. Finally, the TAMP will also serve as an accountability and communication tool for employees to report safety conditions to Senior Management and will inform established capital and operations planning efforts.

II 1.1.2 Local Hazard Management

DTPW Division Managers play a key role in the hazard management process and ensure that the process has been fully integrated within their divisions. Managers also ensure the following elements of the hazard management process are present in their divisions:

a. Ensure employees have the ability to report hazards to management in person or through the use of a hazard identification form;
b. Ensure hazards are placed on the agenda of the Rail Services or Bus Services Safety Management meetings for tracking and documentation;
c. Represent management or select designee to represent management on the Union-Management Safety Committee;
d. Ensure each hazard has been assigned to a specific individual;
e. Assist the OSS in assigning hazard ratings, as needed, (in accordance with the DTPW Risk Assessment Matrix); and
f. Ensure employees are reporting any potential hazards.

II 1.1.3 Rail and Bus Services Safety Management Meetings

Division managers ensure that reported hazards are included in the agenda of the Rail or Bus Services Safety Management meeting agendas, to track hazards pertaining to Rail or Bus Services operations. These agendas and tracking information are maintained within the Rail and Bus Services divisions and are reviewed by the OSS on a monthly basis.

II 1.1.4 Departmental Hazard Management

Hazards identified which are not otherwise captured by other mechanisms outlined in the PTASP or SEPP, will be entered into a Departmental Hazard Log (DTPW Hazard Log), coordinated/maintained by the OSS, to ensure there is a formal process to review incidents, identify trends, and minimize/eliminate identified hazards.

The DTPW Hazard Log will document and track corrective actions for risks and identified hazards, for Metrobus/Metrorail/Metromover modes, which are not otherwise captured by other mechanisms (non-FDOT reportable) outlined in the PTASP or SEPP. These risks will be analyzed to determine the need for corrective actions. Hazards identified as “acceptable with review” may be accepted in an “as-is” condition with no further corrective action. Hazards identified as acceptable without review, will not be entered into the Hazard Log.

Hazards identified as having an unacceptable hazard risk index, per the DTPW PTASP (Hazard Management Section) will not be entered into the DTPW Hazard Log as they are tracked via the State Safety Oversight online reporting system (for Metrorail and Metromover), the monthly FDOT DTPW Corrective Action Plan Log submittals and formal DTPW accident/incident investigation and corrective action tracking procedures.

As per the OSS Standard Operating Procedure (SOP) PR-SS-012, Trackable Hazard Log Procedure, trackable hazards may include those associated with events such as bomb threats, guideway trespassing, rulebook/SOP

violations, and adjacent construction incidents. The OSS Hazard Log Coordinator will maintain the Trackable Hazard Log and will request details of all identified hazardous events occurring in the previous month from theOSS Safety Section and OSS Security Section. The OSS Audit & Compliance Section shall provide the Trackable Hazard Log to the State Safety Oversight Agency the first week of every month.

OSS staff member(s) responding to/investigating each event shall evaluate the event for possible hazards. If a hazard is found, per DTPW's PTASP or SEPP, a CAP shall be written and implemented. All identified hazards and corrective actions shall be provided by OSS Safety Section and/or OSS Security Section to the OSS Audit & Compliance Section with description of the unacceptable hazard, accident/incident and any findings requiring corrective action. The OSS Audit & Compliance Section will track CAPs to completion following SOP PR-SS-003, Internal Safety and Security Corrective Action Procedure.

II 1.1.5 Corrective Action Plan (CAP)

CAPs are utilized within DTPW for hazards that meet certain criteria. The hazards identified in the section above require the development of a CAP, as per SOP PR-SS-003, Internal Safety and Security Corrective Action Procedure.

In accordance with the FDOT Program Standard, FDOT requires DTPW to develop CAPs in response to specific findings and recommendations that may result from the following activities:

- On-site FDOT safety reviews, including the FDOT Triennial Safety and Security Review;
- Accident/incident investigations conducted by DTPW and/or by FDOT;
- Hazards or other deficient safety conditions as determined by DTPW and/or by FDOT;
- Internal safety and security audits, including regular annual audits; and
- Other safety studies or reviews that result in findings or recommendations (such as National Transportation Safety Board (NTSB) recommendations.)

Other scenarios may necessitate CAPs, such as the investigation of FDOT-reportable accidents and incidents, the investigation of hazardous conditions by other Miami-Dade departments, or other safety deficiencies found to require immediate action. For accident investigations, the necessity of CAPs is left to the discretion of DTPW; however, in the event that CAPs are developed, it is the responsibility of FDOT to verify the implementation and completion of each CAP, just as it is with any other CAP.

As the SSOA in Florida, FDOT is responsible for verifying the implementation and completion of CAPs. As required by the Program Standard, DTPW will provide FDOT with regular and timely implementation status updates for each CAP via the DTPW monthly CAP report. DTPW will also provide supplemental updates via email and/or during meetings with FDOT.

CAPs are assigned a specific tracking numbers by Safety Administrators and are placed on the Safety Department hazard log with its associated hazard. CAPs must contain at a minimum:

a. A person of responsibility for the corrective action
b. A proposed completion date
c. Plan approval when applicable

II 1.1.6 CAP Development

The objective of every CAP is to address the original finding or recommendation that generated it. To approve a CAP, FDOT will determine whether or not the proposed CAP adequately satisfies the original finding or recommendation. Proper CAPs are achievable, measurable, assigned to an individual (not just a department or office), and include a realistic target date for completion. CAPs are neither conditional nor merely recommendations from one DTPW division to another. CAPs are statements of specific actions that will be taken, and FDOT expects that DTPW will fully implement all CAPs according to the proposed timeframe established through the target date. In general, the CAP process is as follows:

1. A trigger event occurs (such as an incident, hazard, internal audit, triennial review, etc.),

2. A deficient condition is revealed through investigation,
3. A plan to rectify the deficient condition is generated by DTPW (the CAP),
4. The plan is submitted to the oversight board (FDOT) for approval, (FDOT may request revisions to the proposed CAP at this time),
5. Upon approval of the CAP, work toward completion of the CAP proceeds,
6. FDOT is notified of the actions taken and the steps completed,
7. FDOT verifies acceptable completion of the CAP, including appropriate documentation and on-site verification (if necessary), and
8. The CAP can be considered "closed" only after it has been fully verified, accepted, and approved by the FDOT.

At a minimum, CAP components must include:

- A description of the deficient condition,
- A plan to fix the deficient condition,
- A list of individuals responsible for correcting the problem,
- The estimated time required to complete all remedial actions, and
- A clearly stated goal or end product of the action.

CAP Completion and Closure
Once DTPW considers all work on a CAP to be complete, the agency will notify FDOT and provide FDOT with documentation or other evidence of CAP completion. FDOT will then accept and approve the documentation and upload the documentation to the DMS database. FDOT may request additional documentation, if necessary. In some cases, evidence of completed CAPs must be demonstrated visually, which would require FDOT to complete a site visit to verify completion. A site visit may also be required in the event that documentation is considered sensitive or if it is too voluminous to be transmitted electronically.

Upon verification of the completed CAP by FDOT, the CAP will be considered "closed." The original finding or recommendation that generated the CAP will also be considered "closed" at this time. DTPW and FDOT will update the appropriate DMS forms indicating CAP closure. **It is important to emphasize the point that CAPs may only be officially "closed" by FDOT**.

II 1.2 Hazard Process Overview

Hazards identified by DTPW in the below-outlined hazard management process shall be managed per OSS SOP PR-SS-008, Rail Mover Accident/Incident Reporting & Hazardous Condition Investigation Procedure and OSS SOP PR-SS-005, Metrobus Accident/Incident Reporting and Investigation Procedure. These SOPs specify requirements for notifying the FDOT and initiating the process to categorize, investigate, assess and resolve the hazard(s), including:

- How the hazard was recognized and reported.
- A description of the hazard and the immediate corrective action(s) taken.
- Using the below-outlined risk assessment method - a determination of the initial risk assessment, based on the probability and severity of the hazard if nothing was done.
- Results of the investigation, including the circumstances, events and causal factors leading up to the hazard.
- Additional corrective action that was or will be done to reduce the probability and/or severity of the hazard (including schedule and responsibility).
- Using the below-outlined risk assessment method - a final risk assessment, based on the likelihood of the hazard to occur and its likely severity when the proposed corrective action/resolution is in place.

DTPW's OSS shall maintain investigation files for FDOT-reported hazards, (via FDOT web site) the DTPWHazard Log, and associated files for all other hazards.

The Hazard Identification and Resolution process is applicable to all activities in the DTPW transit system,

including system extensions, modifications, operational changes, or other changes within the transit system environment. The process follows the guidelines listed below and takes existing mitigations into account during safety risk assessment activities.

DTPW's OSS shall investigate all hazards categorized and reported as "unacceptable" to FDOT in accordance with FDOT's State Safety Oversight Program Standards Manual (May 2018) and the FGTS Reportable Event Investigation Procedures. DTPW's OSS shall maintain a file of all documents created for further review by FDOT, as needed.

DTPW shall submit to FDOT, via their website, the following data, regarding Unacceptable Hazardous Conditions (UHC), and their respective CAP:

- Initial report of its investigation of a UHC – Seven calendar days of the UHC's initial reporting
- Status reports of the UHC investigation – monthly via FDOT website
- Final report – upon completion of full investigation
- Provide follow-up report as to the disposition and resolution of corrective actions

II 1.3 Hazard Identification

Identification of hazards is the responsibility of all DTPW employees and contractors. The continuous identification, monitoring, and elimination of hazards is key to an effective system safety program. Hazard identification defines conditions and faults, which have the potential for causing an accident. Hazards can be identified in a variety of ways:

- Formal hazard analyses using the inductive process. They analyze system components to identify failure modes and effects on the total system or a part thereof, as well as personnel actions. Failure modes include conditions such as: fails to open; fails to close; opens or closes when not required; fails to act; acts improperly or inadequately or at the wrong time; or any combination. Examples of formal hazard analyses include Preliminary Hazard Analysis, Failure Modes and Effects Analysis and Job Hazard Analysis.
- Formal hazard analysis using the deductive process to identify sequential and concurrent states, which are causally or conditionally required to support a specific effect. An example of this type of analysis is the Fault Tree Analysis.
- Hazards that develop as a result of accidents/incidents.
- Facility inspections that identify hazards or unsafe conditions.
- Employee observations of unsafe conditions or behavior.
- Results of internal and external audits that identify a hazardous condition
- Observation, inspection, and interaction of all DTPW employees and contractors.
- Reports from safety committee members, passengers, customer service, and field personnel.
- Safety certification, system integration testing, pre-revenue testing, system modification, configuration management verification, and inspection processes.
- Controller logs, daily operating clearances/bulletins, and training feedback.
- "Lessons learned" inputs.
- Review of applicable regulatory codes and standards.
- NTSB, FTA, FDOT, OSHA, safety recommendations, guidance, initiatives, and alerts.
- Nonconformance Reports and Corrective Action Reports and Preventive Action Reports (NCR,CARS) that may arise from DTPW Quality Safety Management Systems audits.

Examples of observed hazards may include:

a. An uneven sidewalk joint that could cause a trip and fall
b. Opening in a section of corridor fencing which allows access of a trespasser
c. A forklift that has an oil or hydraulic leak
d. Broken concrete on stairway
e. Missing fire extinguisher in a maintenance shop

II 1.4 Hazard Investigation, Evaluation, and Analysis

DTPW currently tracks safety concerns, employee injuries, Metrorail/Metromover Station injuries, FDOT-reportable incidents/accidents where identified hazards are tracked and analyzed for any trends and hazard resolution. Safety concerns are identified and corrected at the lowest level (employee/division) as soon as practicable. Safety concerns that are not eliminated at this level are reported to the CSSO or his/her designee. Reported concerns will be assessed to determine if a safety hazard exists and will be assigned an initial hazard rating (IHR), if entered into the DTPW Hazard Log. DTPW's OSS shall investigate all hazards categorized and reported as "unacceptable" to FDOT in accordance with FDOT's State Safety Oversight Program Standards Manual (May 2018) and the FGTS Reportable Event Investigation Procedures. DTPW's OSS shall maintain a file of all documents created for further review by FDOT, as needed. DTPW shall submit to FDOT, via their website, the following data, regarding Unacceptable Hazardous Conditions (UHC), and their respective CAP: (1) Initial report of its investigation of a UHC – Seven calendar days of the UHC's initial reporting, (2) Status reports of the UHC investigation – monthly via FDOT website, (3) Final report – upon completion of full investigation & (4) Provide follow-up report as to the disposition and resolution of corrective actions.

II 1.4.1 Root Cause Analysis and accident evaluation

Hazards are investigated as they are identified through evaluating accidents, incidents, and reported close calls. Hazards originating from accidents are reviewed by the CSSO or his/her designee. As part of evaluating accidents and incidents, root cause analysis is used to help focus on the bottom-line fundamental cause and determine the most effective solutions to mitigating hazards. The primary purpose of the accident evaluation is to determine the cause of the accident and any contributing factors that may have contributed to an accident. A third party expert may be used to assist with an investigation if it is deemed necessary.

II 1.4.2 Hazard Reporting Threshold to FDOT

DTPW will notify FDOT of all hazardous conditions that affect the immediate safety or security of the rail system. At a minimum, DTPW notifies FDOT within one business day, according to the notification procedures in the FDOT program standard, of hazardous conditions that are rated as HIGH and set forth in the transit agency's Hazard Identification/Resolution Matrix.

DTPW is responsible for assigning severity/probability ratings to hazardous conditions. DTPW will include in its hazard log and hazard management process all hazardous conditions, incidents, occurrences, and discoveries that meet the criteria listed below:

a. Incidents involving individuals working in the transit agency-controlled right of way that are investigated by the transit agency.
b. Malfunctions of safety-critical systems that could result, or have resulted in catastrophic or single- point failure.
c. Broken or missing safety-critical equipment, infrastructure, or systems that could result, or have resulted, in employee or passenger injury, or damage to DTPW property.
d. Discoveries of systemic or patterns of employee non-compliance with transit agency rules and procedures.
e. Rail transit vehicle collisions with fixed objects on the mainline or in the yards.
f. Rail transit vehicle derailments in the yards.
g. Face-up or near miss of rail vehicles.
h. Grade crossing warning system activation failure.
i. Speed restriction or track closure due to track or facility damage.
j. Fire or smoke on the track, on a vehicle, or in a facility.
k. Broken or loose wheel or axle.
l. Fallen or dragging rail vehicle equipment.
m. Split switch without derailment.
n. Train uncoupling in revenue service.
o. Signal violation or overrun.
p. Unauthorized train encroachment or overrun into work zone.

q. Vehicle door openings on the wrong side, off station platforms, or during train movement.

r. Incapacitated operator in revenue service.

s. Exposed energized electrical conductors or equipment that can be contacted by passengers or employees.

t. Employee or patron electric shock.

In order to oversee and enforce the implementation of DTPW's PTASP, the FDOT may conduct an independent review, audit, inspection or investigation of the DTPW Fixed Guideway system. DTPW shall provide to the FDOT, upon request, documentation, access to accident/incident sites, activities, personnel, and other fixed guideway system areas as part of the state safety oversight process to ensure DTPW PTASP compliance. FDOT access can either be provided with or without notice to DTPW for all inspection areas. Please see Appendix C, FDOT FGTS Safety and Security Oversight Program Standard Risk-Based Inspection Program. FDOT documentation requests may include, but are not limited to:

- Data and policies/procedures for sharing data that DTPW collects when identifying hazards and assessing and mitigating safety risks.
- Verification of certifications and training of FDOT inspectors to ensure their compliance with agency safety protocols and requirements.
- Policies and procedures that address scheduling inspections, inspection reports, immediate safety concerns, inspections of equipment, infrastructure, and practices specific to DTPW incident verification, ongoing monitoring, defects and corrective or remedial actions, corrective action plan and safety risk mitigation verification.

II1.4.3 Hazard Analysis Matrix

Risk assessment determines the acceptability of assuming a risk associated with a hazard, the necessity of implementing corrective measures to eliminate or reduce the hazard, or a combination of both. Hazard risk assessment involves categorization of hazard severity and probability of occurrence. A Risk Assessment Index, or Hazard Rating Table, is shown below.

HAZARD FREQUENCY	CATEGORY I Catastrophic	CATEGORY II Critical	CATEGORY III Marginal	CATEGORY IV Negligible
Frequent (A)	1A	2A	3A	4A
Probable (B)	1B	2B	3B	4B
Occasional (C)	1C	2C	3C	4C
Remote (D)	1D	2D	3D	4D
Improbable (E)	1E	2E	3E	4E

Hazard Risk Index	Criteria by Index *	
1A, 1B, 1C, 2A, 2B	High	Unacceptable
1D, 2C, 3A,3B	Serious	Undesirable, requires DTPW Director approval
1E, 2D, 2E, 3C, 3D, 3E, 4A, 4B	Medium	Acceptable, with review from DTPW Director
4C, 4D, 4E	Low	Acceptable without review
	Eliminated	Acceptable, no action required

* Criteria by Index definitions:

- **Unacceptable** means the hazard cannot remain as is and must be mitigated.
- **Undesirable** means that the hazard should be mitigated, if at all possible within fiscal constraints. However, it may be mitigated at a later time. Ultimately, however, a management decision must be made by the Director, DTPW, and documented.

- **Acceptable with review**, means the CSSO must determine the risk associated with not mitigating the hazard and review findings with the Director, DTPW.
- **Acceptable without review** means that the hazard can remain.

Managers can use the Hazard Rating Table to prioritize hazardous conditions and focus available resources on the most serious hazards requiring resolution while effectively managing available resources.

II 1.4.4 Hazard Severity

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 modified MIL-STD-882 are as follows:

Category I- Catastrophic
Operating conditions are such that human error, environment, design deficiencies, element, sub-system or component failure or procedural deficiencies may cause death or major system loss (6 hours or more), thereby requiring immediate cessation of the unsafe activity or operation.
Category II- Critical
Operating conditions are such that human error, environment, design deficiencies, element, sub-system or component failure or procedural deficiencies may cause severe injury or illness or major system damage (loss of system up to 6 hours) thereby requiring immediate action including immediate cessation of the unsafe activity or operation.
Category III - Marginal
Operating conditions may cause minor injury or illness or minor system damage such that human error, environment, design deficiencies, sub-system or component failure or procedural deficiencies can be counteracted or controlled without serious injury, illness or major system damage.
Category IV - Negligible
Operating conditions are such that personnel error, environment, design deficiencies, sub-system or component failure or procedural deficiencies will result in no, or less than minor, illness, injury 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.

II 1.4.5 Hazard Probability

A hazard probability may be derived from the analysis of transit system operating experience, evaluation of DTPW safety data, the analysis of reliability and failure data, or from historical safety data from other passenger rail systems or bus systems. The probability that a hazard will occur can be described in potential occurrences per unit of time, events, population items or activity. A qualitative hazard probability may be derived from research, analysis, and evaluation of safety data from the operating experience of DTPW or other similar transit authorities. A depiction of a hazard probability rating system is described below.

DESCRIPTIVE WORD	LEVEL	SPECIFIC INDIVIDUAL ITEM	FLEET OR INVENTORY
Frequent	A	Likely to occur frequently	Continuously experienced
Reasonably Probable	B	Will occur several times in life of an item	Will occur frequently
Occasional	C	Likely to occur sometime in life of an item	Will occur several times
Remote	D	Unlikely, but possible to occur in life of an item	Unlikely, but can reasonably be expected to occur
Improbable	E	So unlikely, it can be assumed occurrence may not be experienced	Unlikely to occur, but possible

II 1.4.6 Hazard Ratings

DTPW has adopted a system for assessing the level of risk for each identified hazard to determine what action(s) must be taken to correct or document the hazard risk. This assessment system has been incorporated into the formal system safety analysis which enables the CSSO to understand the amount of risk involved in accepting the hazard in relation to the cost (schedule, cost, operations) to reduce the hazard to an acceptable level.

The Hazard Matrix (1.4.3) identifies the hazard risk index (HRI) based upon hazard category and probability and the criteria for defining further actions based upon the index.

HIGH risk hazards that receive an unacceptable initial hazard analysis made by management or the CSSO receive immediate attention/control. A high hazard rating requires corrective action.

SERIOUS hazards that are undesirable may require corrective action and decisions by management.

MEDIUM hazards may be acceptable with review by management. Events from a medium hazard are less likely to occur and are less severe in nature.

LOW hazards do not require review and are acceptable.

ELIMINATED hazard is no longer present.

II 1.5 Hazard Control, Elimination, and Tracking

The DTPW OSS is responsible for identifying those issues from accident / incident data, operating infractions, or trends discovered which are significant enough to pose an undue hazard to employees or passengers and facilitate tracking of progress toward resolving those issues. This is done by means of matrices developed by the DTPW OSS, which track those items of interest in terms of the problems discovered, the desired resolution, the individual responsible for resolution, and the progress. The DTPW CAP Log and other tracking documents are maintained for safety audit issues and post-accident or incident issues. Additionally, significant items that do not fall into the above categories are managed through the Rail Incident Review Committee. Rail Services also track potential hazards via a Rail Unusual Occurrence Log which documents, tracking and close-out information regarding reported unusual occurrences, on a monthly basis.

OSS will use the OSS Hazard Log to identify processes used to identify, investigate, assess, and resolve hazards discovered by or reported to the OSS, and that assessed hazards deemed potentially unacceptable will be tracked via the DTPW CAP Log.

As items are corrected, those corrections are noted on the DTPW CAP Log and closed out as appropriate. The DTPW OSS reviews these items on an ongoing basis, and when unacceptable delays are encountered in resolution, the items are escalated to appropriate senior management for assistance in resolution and closure. The DTPW OSS will provide periodic updates of these items to the SSOA.

Safety critical hazards that have been identified must be controlled or eliminated so that the hazard does not continue to pose a danger. This may be done in a temporary manner as long as the hazard is controlled until a long term fix has been implemented.

All hazard log entries will receive a HRI and require the development of a CAP, per the DTPW hazard control process.

CAPs include the following information:

a. Date reported and nature of hazard

b. Risk assessment
c. Response actions
d. Planned corrective actions
c. DTPW person and division responsible for implementing corrective action
d. Status

Hazard log entries, with their associated CAP, are reviewed regularly by OSS and FDOT SSO. CAPs may be tracked and sorted from the hazard log. When a CAP is closed, the Hazard log will reflect this action with a closed date.

II 1.5.1 Hazard Resolution and Elimination

Hazard resolution is defined as the analysis and subsequent actions taken to reduce the hazard to the lowest level practical and the risk associated with the identified hazard. Hazard resolution is not synonymous with hazard elimination. In a transit environment, there are some hazards, which are impossible to eliminate and others, which are highly impractical to eliminate. Reduction of risk to the lowest practical level can be accomplished in a variety of ways from protective and warning devices to special procedures.

A number of different means are employed to resolve identified hazards. These include design changes, the installation of controls and warning devices, and the implementation of special procedures. The order of precedence for resolving hazards is as follows:

Design for Minimum Risk
From the beginning, eliminate hazards through engineering and design.

Safety Devices
Hazards that cannot be eliminated or controlled through design selection shall be controlled to an acceptable level through the use of fixed, automatic, or other protective safety design features or devices. Provisions shall be made for periodic functional checks of safety devices.

Warning Devices
When neither design nor safety devices can effectively eliminate nor shall control an identified hazard, devices be used to detect the condition and to generate an adequate warning signal to correct the hazard or provide for personnel evacuation. Warning signals and their application shall be designed to minimize the probability of incorrect personnel reaction to the signals and shall be standardized within like types of systems.

Procedures and Instruction
Where it is impossible to eliminate or adequately control a hazard through design selection or use of safety and warning devices, procedures and training shall be used to control the hazard. Procedures may include the use of personal protective equipment. Precautionary notations shall be standardized as specified by management. Safety critical tasks and activities may require certification of personnel proficiency.

Safety resource management and techniques shall be developed, on a prioritized basis, which will identify resolutions or controls to help prevent recognized hazards and faults from becoming incidents or accidents or to reduce the effects of such events. The results of the Hazard Risk Assessment will be prioritized for resolution action, including identification of permanent, temporary, deferred resolutions; alternative actions; and supporting rationale. This is the primary task used for improving the safety performance of the system since it provides information to management and others regarding hazard resolution. The requirements for this effort include:

1. Determine and establish detailed resolution methodology alternatives.
2. Establish methods for conducting System Safety trade-off.
3. Evaluate Hazard Risk Assessment reports and develop resolution priorities.
4. Verify implementation of resolution and monitor the effects.
5. Forecast impacts resulting from implementation of resolution alternatives.

6. Establish a residual risk index pursuant to implementation of corrective actions(s)
7. Document findings related to hazard resolutions
8. Submit CAPs to FDOT.
9. Provide FDOT verification that Corrective Actions were completed.
10. Establish and maintain a tracking process for reporting, monitoring, and documenting the resolution of hazards.

II 1.6 Hazard Tracking

DTPW hazard tracking is covered in Section II 1.5. Each CAP developed will be submitted to FDOT SSO as required for initial review and approval. Upon completion of the corrective action, the safety department will submit the CAP to FDOT SSO for adoption. The completed CAP is formally adopted by receiving FDOT SSO approval.

Internally, OSS will coordinate with the appropriate divisions to develop a CAP for the identified hazard and placed in the DTPW CAP Log for tracking purposes.

II 1.7 Ongoing Reporting To State Safety Oversight Agency

In the event DTPW determines that the final risk assessment of the hazard is "unacceptable", using the risk assessment, DTPW shall notify, per FDOT Rule 14-15.017, FDOT within 24-hours or by 5:00 p.m. on the next regular working day following the determination of the unsafe condition as "unacceptable". DTPW's OSS shall transmit an electronic copy of the Hazard Worksheet via the FDOT's SSO web site.

All hazards identified and rated as unacceptable hazardous conditions will be separately tracked and reported to FDOT along with the CAPs for each unacceptable hazardous condition found. All hazards identified and rated as unacceptable hazardous conditions will be separately tracked and reported to FDOT with determination of an unacceptable hazardous condition.

FDOT will notify DTPW in writing of its acceptance or rejection of the CAP and in accordance with procedures specified in the FDOT SSO Program Standard. The CAP is maintained in the DTPW Office of Safety & Security files and is identified by a specific CAP identifier tracking number. After a hazard has been resolved, it will be assigned its final hazard rating.

II 1.8 Job Safety Briefing

All employees are encouraged to identify and control or resolve hazards at the lowest management level possible. Employees that perform job tasks are required to discuss job tasks and identified hazards that are associated with those tasks or job steps during job briefings. Identified hazards that cannot be controlled with PPE or procedures must be resolved or mitigated through the hazard management process.

II 1.9 Safety Management System (SMS)

Under SMS, employees are asked to be aware of their surroundings, processes, or work areas and to observe and report all hazardous conditions or potentially hazardous conditions to their supervisor. Along with their supervisor, the employee should work to mitigate those hazards.

Prevention of hazardous conditions prior to an injury or equipment damage occurring is the goal of SMS. Compliance with regulatory standards such as OSHA, FTA and FDOT is a primary goal of maintaining ongoing certifications. Annually, the DTPW OSS coordinates with the Rail Services and Bus Services operational division heads to update current Job Safety Analyses for each work area within the respective division to determine compliance with the requirements. Each hazard is evaluated and assessed as to the potential injury or equipment damage that could occur if a mishap or injury took place to ascertain if any changes in the hazard rating have occurred thus necessitating additional employee protection. DTPW OSS has been working with DTPW Finance to request an additional full-time data analyst position to serve as lead in supervising new computer safety hazard tracking software due to the amount of hazard data to be tracked, analyzed and associated coordination/distribution with DTPW Operational Divisions and Performance Analysis. OSS coordinates with the Performance Analysis Division to include additional safety metrics, as needed, to track important trends. All SMS-related documentation is maintained for at least 3 years (in the OSS files) and are available to the FTA, other Federal agencies and the SSOA, upon request.

The Performance Analysis Division assists DTPW management in:

- Planning, scheduling, implementing and controlling maintenance programs to ensure system dependability, reliability, safety and dependability;
- Assuring/developing/implementing adequate control measures for repair processes, reliability of equipment and maintainability programs;
- Monitoring, evaluating and maintaining established performance of the DTPW system.

The Performance Analysis Division publishes a monthly DTPW Operations Report that includes key operational and PTASP safety goals/measures. A normal regular performance monitoring meeting (monthly frequency, at a minimum) is scheduled before the weekly DTPW Operations meeting, to assist DTPW divisions (operational, Field Engineering, Safety, QA, etc.) by presenting tracking, analysis & trending data/graphs in order to address areas of concern (i.e. frequent parts/equipment failures, PM performance below goals, not meeting performance goals, etc.).

The Performance Analysis Division is currently working on a Transit Asset Management Risk Program SOP to specify a comprehensive process for identifying, assessing, monitoring, managing and reporting risks and opportunities within the Agency. This SOP will address potential threats through the active identification, assessment and monitoring of risks to mitigate the probability or impact of unforeseen events and to maximize the realization of opportunities. Safety Performance Targets (SPT) are covered in this SOP and the OSS is working with the Performance Analysis Division to include how SPTs will be coordinated, tracked and analyzed for trends.

The Performance Analysis Division also:

- Coordinates the implementation of the DTPW Scorecard performance reporting, including the deployment of the scorecard to all departmental divisions and alignment to the DTPW Business Plan.
- Monitors, analyzes and reports progress specified objectives.
- Defines and establishes departmental wide key performance indicators used to measure the departments overall service delivery levels.
- Develops and identifies measures, initiatives and objectives to support performance levels.
- Incorporates concepts and principals for performance excellence.
- Prepares and analyzes data for reports to the FTA National Transit Database (NTD), and provides Monthly Ridership Reports, monthly safety and security for Demand Response, and related data to APTA, FDOT, CITT, and TPO.
- Coordinates the implementation of the DTPW TAMP to maintain agency critical State of Good Repair.

II 2 Hazardous Materials Program

II 2.1 Management of Hazardous Materials

DTPW employs strategies to minimize the exposure of the public, patrons, employees and assets to hazardous and unsafe conditions/activities. As such, proper handling, use and disposal of hazardous materials are important functions at DTPW. Each departmentshall maintain and update information on materials in their areas of jurisdiction. This information includes technical specifications, Safety Data Sheets (SDS), instructions and procedures. SDS information shall be available via online access using SDS ONLINE software. Hard copies of SDS documents shall be updated and maintained by Materials Management Staff. The SDS sheets shall be filed at appropriate DTPW Division in books by functional inventory stock codes that are written on the sheets. The paper sheets are segregated by commodity, (i.e. solvents, paints, cleaners, etc.). An index and tabs are being added to facilitate searches. DTPW Procurement personnel shall be trained in the use of the electronic SDS internet application. Training shall be provided to departmental representatives for this application.

The DTPW initial and refresher training classes shall address hazardous materials and appropriate personal protective equipment (PPE) to cover a variety of issues including, but not limited to: confined space entry,

respiratory protection, blood-borne pathogens, Hazmat spills and technical instruction, which emphasizes safe handling of hazardous materials. Documentation including: class rosters, sign-in sheets, class agenda and content shall be maintained by the specific Rail Services Divisions.

DTPW, Materials Management shall ensure that materials procured meet specifications and are properly labeled and packaged. All new procurements for a chemical agent, substance or compound shall be sent to the DTPW OSS for review and approval before being brought onto DTPW property.

The DTPW Hazard Communication and Right to Know Policy, is designed to ensure that DTPW is in compliance with the Federal Occupational Safety and Health Act (OSHA), "Hazard Communications Standard" or "OSHA Right-To-Know Law" and other applicable, Federal, State, or Local Standards and to enhance the safety of the workplace by accomplishing the following objectives:

A. Inform each applicable employee of the toxic substances to which he/she may be exposed to in the course of pursuing authorized activities related to his/her job.

B. Provide training to employees regarding the safe handling, use, storage and emergency procedures related to toxic substances in the work place. Advise employees of their rights under the Law, and that additional information on toxic substances is available to them by contacting the Toxic Substances Information Center.

C. Ensure all containers at DTPW which contain toxic substances are properly labeled with the chemical name, appropriate hazard warning (incl. name/address of the manufacturer/vendor)

D. Make available to fire and emergency personnel the location and characteristics of toxic substances regularly present in the work place.

E. Promote a safe workplace at DTPW.

A toxic or hazardous substance is defined as any chemical substance or mixture in a gaseous, liquid, or solid state which is used, applied, or stored at DTPW and causes a significant risk to safety or health during, or as a proximate result of, any customary or reasonably foreseeable handling or use.

The OSS is responsible for administering, coordinating and verifying compliance with the Hazard Management Program. All DTPW management and supervisory personnel of all DTPW Divisions are responsible for compliance with the Program as applicable to their Division/Section.

In all DTPW operations and locations the least hazardous product, capable of performing the desired purpose, will be selected and utilized. Wherever possible, hazardous products will be replaced with less hazardous substitutes. The use of a product at DTPW may be disapproved by the OSS based on the product having one or more of the following characteristics:

- Carcinogen or suspected carcinogen
- Strong acid (ph < 3 .5) or strong base (ph> 11.5)
- Strong respiratory irritants (e.g . isocycanates)
- Other hazardous characteristics deemed unacceptable

Priority will be placed on utilizing feasible administrative and/or employee
engineering controls to reduce exposures to hazardous substances in the workplace, such as:

- Administrative Controls include substitutions to less hazardous products/processes; or reducing exposures by rotation of workforce.
- Engineering Controls include enclosing/containing hazardous processes; or installing adequate ventilation; or both.
- Personnel Protective equipment (e .g. , respirators, gloves, etc .) will be used as a last resort or to

supplement the above controls in reducing employee exposures.

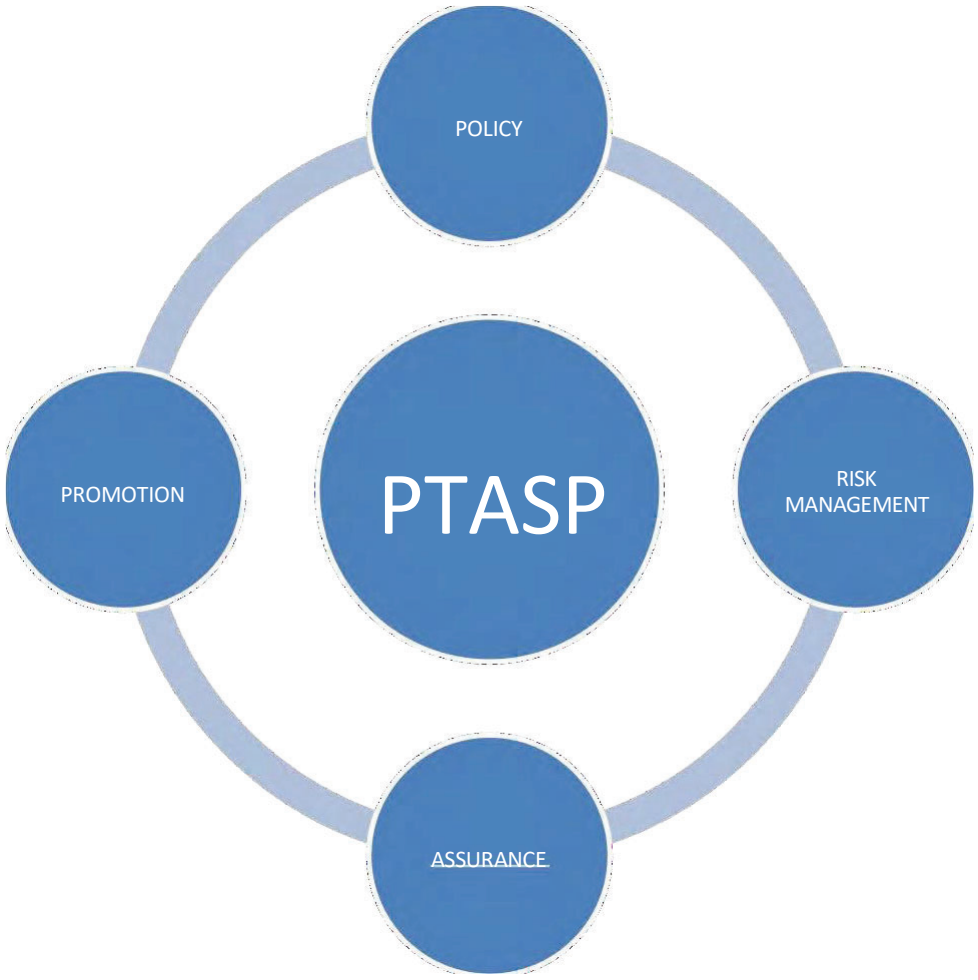
The OSS will act as the central repository, for all documentation relating to the Program. The OSS will promulgate modifications that may be required to meet changing workplace conditions or requirements in the Program or Law and shall be responsible for the following occupational safety and health activities that deal with hazardous materials:

- Coordinates industrial hygiene inspections and monitoring
- Responds to exposure emergencies
- Performs reviews and audits of authority policies
- Reviews capital projects for hazardous materials/conditions
- Reviews new procurements for hazardous materials
- Provides technical expertise and advisement
- Assists, if necessary, the DTPW Environmental Engineer, as regulatory liaison for DTPW
- Oversees and audit performance on various hazardous material programs.

Planning, Engineering and Construction, DTPW OSS, and Rail Maintenance and Facilities Maintenance divisions shall collaborate to accomplish the following hazardous materials activities:

- Spill response, clean up and investigation
- Annual environmental audit of all facilities, properties and projects
- Capital program review and advisement
- Authority policy and procedure review and implementation
- Technical advisor and expertise
- Regulatory review and implementation
- Administrative functions including asbestos/lead-paint abatement, industrial hygiene, hazardous waste and environmental lab contract preparation.

III. ASSURANCE



III ASSURANCE

Pillar III of the Public Transit Agency Safety Plan is **Safety Assurance**, which outlines how DTPW implements, measures, and reviews processes to ensure that it remains in compliance with established standards. These processes and reports will provide the confidence to DTPW leadership that the organization and system is functioning within an acceptable level of safety. The audits, inspections, rules checks, and compliance verification procedures are described, required schedules are established, and acceptable measures are identified.

III 1 Internal Safety and Security Audit/Review Program

49 CFR § 673 identifies requirements for planned and scheduled internal safety audits. They are performed to evaluate compliance with DTPW's Public Transit Agency Safety Plan (PTASP), as per DTPW SOP PR SS-001 Internal Safety & Security Audit Procedure. All DTPW divisions and functions are subject to review. DTPW's Internal Safety and Security Audit/Review Programs contain a comprehensive series of processes utilized to determine the compliance and effectiveness of DTPW's PTASP and Security Emergency Preparedness Plan (SEPP), which are applicable to all divisions and functions.

The DTPW Director has delegated authority to establish and implement the PTASP to the CSSO who oversees the safety performance functions of DTPW. The CSSO has the responsibility to develop and implement programs to promote safe operations, to reduce, or eliminate, accidents and to monitor PTASP compliance and maintenance.

The CSSO assigns responsibility and authority to the assigned internal audit team members to interface with FDOT SSO, to provide the internal oversight of the PTASP compliance; and to oversee the internal safety audits.

DTPW's audit team members conduct ongoing, planned, and scheduled internal safety audits, reviews, and inspections of DTPW's divisions and functions to evaluate compliance with PTASP requirements. The audit team also measures the overall effectiveness in achieving the goals and objectives of the PTASP. DTPW audit team members use a checklist approach to determine compliance.

Internal audit team members are independent from the first line of supervision responsible for the activity being audited. This means that audit team members will not be assigned to audit the workgroup that they are assigned. As an example, Safety Section personnel will not be assigned to audit other Safety Section personnel.

DTPW uses the "Recommended Best Practices for States Conducting Three-Year Safety Reviews" document produced by the FTA OSS. This document identifies eight (8) types of verification methods that can be used by the internal auditors to perform the three-year audits. These are the same guidelines that the State Safety Oversight (SSO) uses for its DTPW three-year Triennial audits. It is recommended that the internal auditors use more than one method to verify compliance. Depending on the area being inspected, a field visit which allows observation of processes and personnel, may be required.

DTPW has developed an Internal Audit Checklist for the elements/areas of the PTASP. The check list includes the elements to be assessed, which of the eight (8) on-site verification methods will be used, and recommendations for how these methods can be applied to each of the specific elements. If a specific checklist item does not have applicability to the audit topic, the auditor should note that item as not applicable (N/A), with a brief description to include personnel interviewed and processes discussed.

Audit teams may conduct field observations to make observations of the work process in the area being audited. Auditors should interview supervisors to verify compliance with rules and procedures. In addition to completing audit checklists, supporting documentation for verifying compliance with rules checks and compliance verification may also be incorporated as part of the audit. This will verify that rules checks and observation are an ongoing practice within the divisions. Supporting documentation may be obtained from safety personnel and division supervisors.

The audit team members will complete the Audit Checklist by completing all applicable verification methods of "Recommended Activities" used during the audit, including copies of rules, processes, charts, etc. discussed, as evidence of compliance or of non-compliance of specific requirements. In conjunction with the CSSO, the audit team members will make a determination of "compliance" when a division or function is substantially adhering to the PTASP requirements. Determination of compliance may include recommendations for

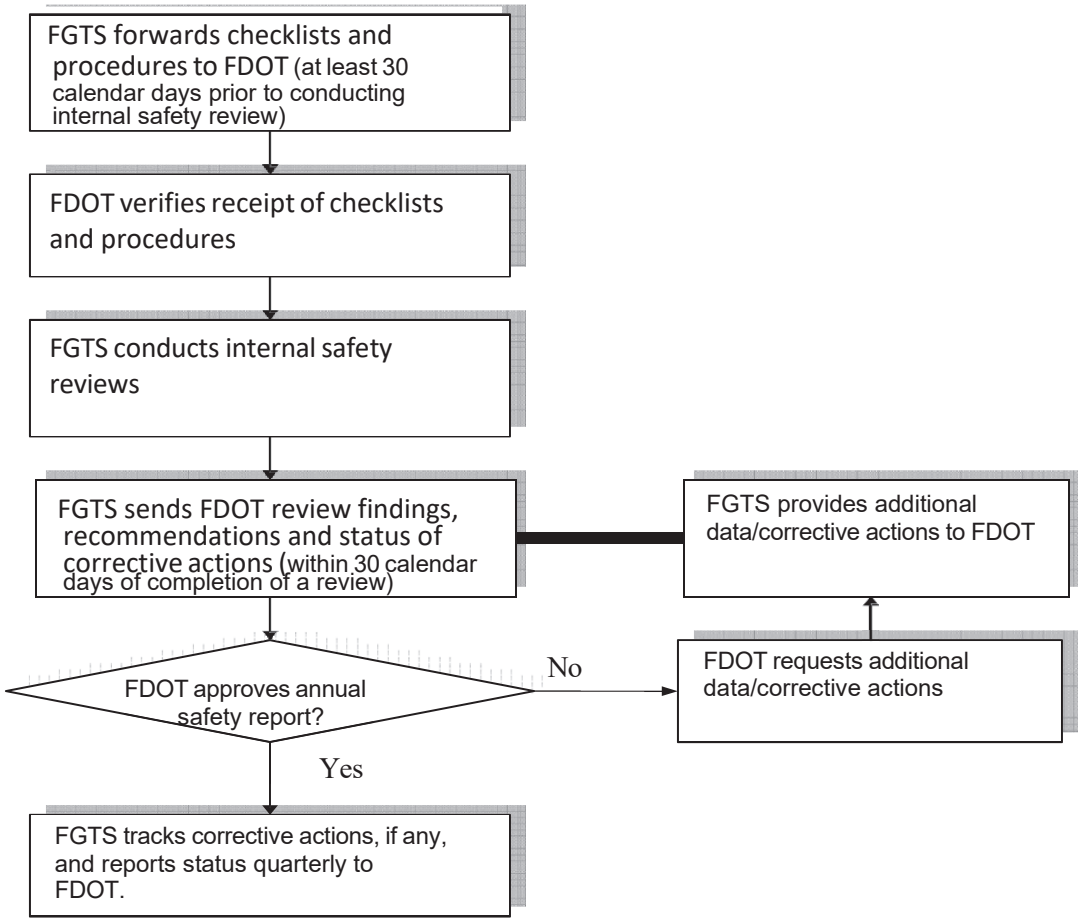
improvement of PTASP process activities or prevent future determinations of non- compliance. The division will review the recommendation and consider measures to improve process activities. In the event the division is substantially not adhering to the PTASP, then a finding of non-compliance will be issued to the division. That division is required to respond to or resolve the finding by creating a CAP and to provide a planned completion date. Managers of divisions have the responsibility to take corrective actions plan as recommended by the audit team reports. Upon completion, the CAP must be adopted by the DTPW OSS, and by FDOT if required. CAPs developed from audit findings of non- compliance with recommendations, and from compliance with recommendations are reviewed, accepted, and placed on the DTPW CAP Log for tracking purposes by the DTPW OSS in coordination with FDOT SSO.

All audits shall be performed per FDOT's State Safety Oversight Program Standard. The CSSO is responsible for developing a three-year schedule for all internal audits. This schedule is distributed to all affected divisions and to the state safety oversight manager. The schedule is furnished as a separate document to FDOT SSO.

FDOT is invited to participate in all internal audits. The CSSO or audit team leader notifies the FDOT State Safety Oversight office at least 30 days prior to conducting an internal audit so that FDOT may schedule and participate in those audits as desired.

The internal audit team notifies all affected divisions and provides the manager of the division with a current checklist of audit requirements. Sufficient time is given to the division to prepare all necessary materials for the audit.

The CSSO or his/her designee completes individual audit reports and submits them to FDOT within 30 days of audit completion. In addition the annual safety audit report, detailing DTPW's internal safety and security review activities, is submitted for the past year, with subsequent findings. The report is certified by the DTPW Director, and forwarded to FDOT, on or before February 15 of the following year. Internal safety review process is illustrated below.



III 2 Incident Notification, Investigation, and Reporting

III 2.1 Notification Thresholds

III 2.1.1 Internal Notification

Initial internal incident/accident notification is initiated by DTPW control centers via a phone call or electronically, via text message and/or e-mail, through the DTPW emergency notification list.

The Metrobus, Metrorail, Metromover Traffic Controller will initiate internal notification resulting in the following:

a. Incidents resulting in possible injury or death of persons
b. Fire
c. Hazardous materials spill or release
d. Other situations that may require response by local emergency personnel

Voice/Electronic notification requires the following information:

a. Time, date, location, and direction of travel
b. Type of accident and description of incident
c. Number of persons injured (transported)
d. Estimated damages

Workplace incidents/injuries that require the first report of injury form to be completed will require supervision to notify the DTPW OSS, at the time of the incident.

III 2.1.2 FDOT/SSO Notification

Rail Fixed Guideway (Metrorail/Metromover)

DTPW shall notify FDOT and the FTA (using the electronic reporting system as specified and required by 49 CFR Part 674.39(b)) within two hours of any safety or security event involving a rail transit vehicle or taking place on FGTS controlled property where one or more of the following accidents occur:

- Fatality, including all loss of life that occur on a transit property or are related to transit operations or maintenance, that occur within 30 days following the accident. This includes suicides.
- One or more persons suffering serious injury (Serious injury means any injury which: (1) Requires hospitalization for more than 48 hours, commencing within seven days from the date of the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (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 five percent of the body surface.);
- Property damage resulting from a collision involving a rail transit vehicle;
- A collision between a rail transit vehicle and any other vehicle or person;
- A collision with an object that results in a serious injury or fatality;
- A grade crossing collision;
- A runaway train;
- Evacuation due to life safety reasons at any location, but also including, the offloading of passengers off any train into any non-station location, such as on the guideway, at grade, or along a street;
- Any derailment at any location, at any time, whatever the cause;
- Any splitting or trailing of a switch regardless of the location or outcome, and including situations when the train remains fully railed.

Initial Notification: Incidents. Additionally, the FGTS must notify FDOT within two hours of the following incidents:

- Non-collision related damage resulting to equipment, rolling stock, or infrastructure that

disrupts the operations of a FGTS;
- Low-speed collisions involving a rail transit vehicle that result in a non-serious injury or property damage;
- Damage to catenary, third-rail, or other power distribution equipment that disrupts operations;
- Fires that result in a non-serious injury or property damage;
- A personal injury that is not a serious injury;
- Hazardous material spills

Initial Notification: Occurrences. The FGTS must notify FDOT within 24 hours of:
- Close Calls and/or Near Misses; (see definitions)
- Non-collision related damage to equipment, rolling stock, or infrastructure that does not disrupt the operations of a transit agency
- Safety rule violations;
- Passenger self-evacuations
- Violations of safety policies;
- Vandalism or theft

Notification Content: Event notifications to FDOT must include descriptions of the following:
- Name and Job Title of person reporting accident, incident or hazardous condition
- Event Type (fatality, injuries, property damage, evacuation, derailment or other)
- Location, Time, Date
- Number of fatalities
- Number of injuries, including the type of injury if known
- Rail transit vehicle(s) involved (type, number)
- Other vehicle(s) involved (type, number)
- Property damage estimate (RTA shall attempt to report actual dollar amounts)
- If the event is NTSB reportable
- FGTS primary person conducting the investigation (name, title, phone numbers and email address)
- Physical Characteristics of the Scene
- Interview Findings
- Sequence of Events
- Probable Cause(s) and Contributing Factors
- Conclusions
- Recommendations and Corrective Actions
- Document Control Number
- Attachments that include all related reports (i.e., Service Quality, police, operator, witness statements, photographic evidence)

Metrobus

DTPW shall thoroughly evaluate and analyze all accidents to determine causal and contributing factors of the accident. Metrobus-related accidents are investigated by the appropriate first line supervisor, and are then evaluated by the Bus Accident Grading Committee. The following criterion has been established under FAC Chapter 14-90.004 to identify those incidents that require accident investigations:

(a) A fatality, where an individual is confirmed dead within 30 days of a bus transit system related event, excluding suicides and deaths from illnesses.

(b) Injuries requiring immediate medical attention away from the scene for two or more individuals.

(c) Property damage to bus transit system bus, non-bus transit system vehicles, other bus system property or facilities, or any other property, except the bus transit system shall have the discretion to investigate events resulting in property damage less than $1,000.

(d) Evacuation of a bus due to a life safety event where there is imminent danger to passengers on the bus, excluding evacuations due to operational issues.

For investigation, the chart below shall dictate investigative level thresholds for incidents involving Metrobus:

BUS		Accident/Incident	Accident/Incident with damage over $1000.00 or injuries requiring treatment away from the scene.	Accident/Incident resulting in death or multiples injuries requiring treatment away from the scene.
A	Supervisor	Required	Required	Required
B	Accident Grading Committee	Required	Required	Required
C	OSS concurrent review of accident/incident		If determined by DTPW CSSO	Required
D	Investigation by OSS, Accident Investigation Team		If determined by DTPW CSSO	If determined by the DTPW Director or CSSO
E	Investigation by Investigation Board			If determined by the DTPW Director or CSSO
F	Notification to FDOT and FTA by OSS			By end of next business day, if event results in a fatality.

Accident notification and response are included in DTPW's procedures. All necessary emergency response agencies, DTPW management personnel, and regulatory agencies are included in the notification process, in accordance with FDOT FAC 14-90.

Each investigation shall be documented in a final report that includes a description of investigation activities, identified causal factors, and any identified CAP. Each CAP shall identify the action to be taken and the schedule for its implementation. The OSS shall monitor and track the implementation of each CAP through each respective, responsible division's feedback and actions.

Investigation reports, CAPs, and related supporting documentation shall be maintained by the bus transit system a minimum of four years from the date of completion of the investigation. The Final Investigation Reports shall be provided to the FDOT, as required.

III 2.1.3 NTSB Notification

The DTPW OSS will notify the NTSB, by telephone, using the National Response Center (NRC) at 1-(800)-424-0201, within two hours of any accident/incident meeting the following criteria per 49 CFR 840:

a. A passenger or employee fatality or serious injury to two or more crew members or passengers requiring admission to a hospital
b. The evacuation of a passenger train

Notification will also be made, no later than four hours after an accident, regarding any accident resulting in:

a. Damage of $150,000 or more for repairs or the current replacement cost, to railroad and non-railroad property
b. Damage of $25,000 or more to a passenger train and to railroad and non-railroad property

III 2.1.4 FTA Notification

In accordance with 49 CFR 674.33, the transit agency must provide notification to FTA of any reportable accident within two hours for the following.

a. A collision between a rail transit vehicle and another rail transit vehicle.
b. A collision at a grade crossing resulting in serious injury or fatality.
c. A collision with a person resulting in serious injury or fatality.
d. A collision with an object resulting in serious injury or fatality.
e. Property damage resulting from a collision involving a rail transit vehicle; or any derailment of a rail transit vehicle.

The DTPW OSS will notify FTA of an accident by contacting the U.S. Department of Transportation, Transportation Operations Center (TOC) within two hours of a reportable accident by emailing TOC-01@dot.gov (recommended method) or by phone: 202-366-1863.

III 2.1.5 OSHA Notification

The DTPW OSS will notify Florida OSHA at (954) 424-0242 within 8 hrs. of any workplace accident resulting in the following:

- Fatalities (including heart attacks)
- Admittance to the hospital of 5 or more employees

III 2.2 Accident Investigation Process

FDOT SSO has formally authorized DTPW to conduct its own investigation of Rail/Bus accidents, and will utilize DTPW's investigation as its own investigation, unless FDOT SSO decides to conduct its own investigation. FDOT may decide to conduct an independent investigation in addition to the transit agency's investigation. Accidents that are investigated by DTPW are conducted per PR SS-008 Rail-Mover Accident/Incident Reporting & Hazardous Condition Investigation Procedure (PR-SS-008) and Metrobus Accident Incident Reporting & Investigation Procedure (PR-SS-005).

Per the FDOT Fixed Guideway Transportation Systems State Safety and Security Oversight Program Standard, Section 7.5 FDOT Investigations, if FDOT chooses to perform an independent investigation of a FGTS event, it must issue a final investigation report within 30 calendar days of the conclusion of the investigation.

The DTPW OSS shall coordinate the review of the final FDOT investigation report, and within 15 calendar days after receiving it, submit a corrective action plan to FDOT for review and approval.

III 2.2.1 Incidents/Accidents Investigation

Rail incidents that require two hour notification to the FDOT SSO will be investigated by the DTPW OSS. Rail investigations will be conducted in accordance with the Rail Safety Investigation Procedure. The Rail Safety Investigation Procedure can be found on the DTPW OSS share drive. A third party investigator (contract expertise) will be assessed on a case by case basis in consultation with FDOT.

III 2.2.2 Workplace Incidents/Injury Investigations

Workplace incidents/injuries that require employees to complete the first report of injury must be investigated at a minimum by a supervisor. For accidents/incidents not classified as non-FDOT reportable, the DTPW Hazard Log will be used to document and track corrective actions for risks and identified hazards, for Metrobus/Metrorail/Metromover modes.

III 2.3 Reporting Incidents/Accidents

III 2.3.1 Reporting to FDOT SSO

Reports and corrective actions are available to FDOT which includes all incidents that meet reportable FDOT thresholds and are reviewed during monthly conference calls and/or site visits.

In conducting an accident investigation, the DTPW shall provide the materials listed below to FDOT on the following schedule:

- **Notification**: Basic information about the reportable accident must be transmitted to FDOT during the notification process.
- **Preliminary Written Report**: As soon as possible after the accident/incident, but within two business days, the FGTS must email preliminary written information, including any accident investigation summary information, preliminary reports from field personnel, and other available information.
- **Investigation Status Report**: The investigation report prepared by the FGTS must be submitted to FDOT within 30 calendar days following the completion of the investigation. However, if the investigation cannot be completed within 30 days of the accident/incident, the FGTS must prepare and submit monthly status investigation reports by the 15th of each month. The status investigation reports at a minimum shall include:

    - Minutes of any meeting held by an investigation committee or contractor;
    - Disclosure of any immediate corrective actions the FGTS has planned or completed;
    - Principal issues or items currently being evaluated; and
    - Overall progress and status of the investigation.

Briefings: At any time during an investigation, the FGTS shall be prepared to provide a full briefing on the known circumstances of the event, status of FGTS or NTSB investigation, and investigation activities to the FDOT and FTA.

The Draft Final Report must contain the following information, at a minimum:

a. Executive summary
b. Sequence of events, including a comprehensive description of injuries, fatalities, and property damage with estimated dollar value
c. Clear description of events before, during, and after the accident/incident
d. Findings and analysis, including investigation activities
e. Description of the investigation process and methodology
f. Description of post-accident/incident testing and research conducted
g. Conclusions, including any findings
h. Probable and contributory causes

i. Recommendations to prevent reoccurrence
j. Supporting analysis to defend any recommendations made
k. Short- and long-term actions
l. Changes to rules, policies, or procedures
m. CAP(s) to address any findings resulting from the investigation.

FDOT reports all reportable FTA incidents in an annual report.

III 2.3.2 Reporting to National Transit Database (NTD)

As part of complying with reporting requirements DTPW will submit monthly safety summary report (S&S-50) and any major incident report (S&S-40) forms for both bus and light rail operations that meet reporting thresholds defined by the NTD.

III 2.3.3 Reporting within DTPW

The DTPW OSS reports are made available to DTPW Deputy Directors and division heads. Reports will be forwarded by the CSSO to the /DTPW Director as needed.

III 2.4 Corrective Action

III 2.4.1 Safety Division Review

The DTPW OSS reviews all incident reports that are not reportable to FDOT for potentially serious incidents or conditions. The DTPW OSS may also initiate an investigation to determine causal or contributing factors for incidents it deems necessary. Findings from the investigation that identify serious hazards, will require a CAP and will be placed on the Hazard Log. The Safety Section will then coordinate with the appropriate divisions to develop a CAP and fill out a CAP for the identified hazard.

The CAP will contain:

a. Action to be taken
b. Proposed completion date
c. Individual or division responsible for implementation

III 2.4.2 FDOT Review

DTPW will develop a CAP for submission to FDOT when:

a. Results from an incident/accident investigation contain identified causal factors that are determined by DTPW or FDOT as requiring corrective actions
b. Hazards or deficiencies are identified from internal and audits performed by DTPW or FDOT.

The CAP will contain:

a. Action to be taken
b. Proposed completion date
c. Individual or division responsible for implementation
d. Process or plan for implementation of plan
e. Date CAP was opened
f. Identify noteddeficiency/finding/hazard
g. Cost resolving deficiency, if known or applicable

Each CAP resulting from an FDOT-reportable investigation, or from hazards or deficiencies identified, will be made available to FDOT SSO for review. The CAP will be assigned a tracking number and placed on the DTPW CAP Log with its identified hazard. Upon completion of the corrective action, the DTPW OSS will submit to FDOT the completed CAP for adoption. Once approved by FDOT, the CAP Log will then be updated to show the status of the identified hazard with its CAP to "CLOSED".

DTPW will monitor all CAPs with the use of the DTPW CAP Log and will provide FDOT with an updated log monthly. The CAP process shall be in accordance with DTPW SOP PR SS-003 Internal Safety Security Corrective Action Plan Procedure.

III 3 Safety Data Collection and Analysis

Safety data is collected and stored by the Safety Section personnel on a secured network drive (Safety Y:\\ Drive). Safety critical hazards are identified, investigated, reviewed, resolved, and tracked by the DTPW OSS through the DTPW Hazard and CAP Logs. These logs are made available to FDOT SSO, upon request.

Accidents, incidents, and other safety concerns are also recorded and tracked by the DTPW OSS using DTPW's CAP and Hazard Logs. In addition, DTPW personnel involved in an accident or incident are required to complete DTPW's accident/incident reports. On-scene supervisors file supervisor's accident /incident report forms. Copies of these documents are sent to the OSS for processing.

The DTPW OSS is responsible for identifying those issues from accident / incident data, operating infractions, or trends discovered which are significant enough to pose an undue hazard to employees or passengers and facilitate tracking of progress toward resolving those issues. This is done by means of matrices developed by the DTPW OSS, which track those items of interest in terms of the problems discovered, the desired resolution, the individual responsible for resolution, and the progress. Matrices are maintained for safety audit issues and post-accident or incident issues. These matrices, based on the data analyzed, are distributed to DTPW Divisional personnel responsible for resolution of action items. Additionally, significant items that do not fall into the above categories are managed through the Rail Incident Review Committee or the Metrobus Accident Grading Committee, as appropriate.

Safety performance must document known hazards and initiate corrective measures to reduce them to an acceptable level to prevent accidents and minimize risk. Development of a trend, or factors that are constant for any event, will determine an optimal degree of safety, within the constraints of operational effectiveness, time and, cost while taking other factors into consideration. Factors considered are the evaluation of cost, probability of damage, notoriety factor, frequency, and severity of exposure, and the balance of benefit to loss.

DTPW also obtains data from the NTD, US DOT, the National Safety Council, NTSB, APTA, and other transit organizations.

The DTPW OSS reviews Bus/Rail Central Control Center's daily logs and records incidents involving the rail/bus systems. Incidents meeting minimum threshold levels are reported to FDOT and FTA as required by current regulations.

DTPW shall collect and conduct analysis of safety data to maintain safe working conditions at DTPW. Hazard identification and analysis of accidents will be used to prevent future incidents and accidents. DTPW reviews accidents and incidents, looks for undesirable trends, and regularly reports safety data to the FDOT, Federal Transit Administration (via NTD), OSHA, NTSB, and DTPW divisions as required. Data collected and utilized in respective safety analyses include, but are not limited to the following:

- Employee on-duty accidents
- Passenger on-train/bus accidents
- Station accidents
- Rail/bus accidents
- Employee accidents: monthly, annual and previous years
- Lost time data
- Accident severity and frequency
- Risk severity

Other sources of data include:

- Daily Central Control Logs

- Accident/Incident Reports
- DTPW Hazard Log
- Police Reports
- Employee Training records
- Maintenance Records
- Rule Check Reports

III 4 System Modifications (Management of Change)

System modification is the result of any changes to the transportation system, equipment, and/or facilities. This Management of Change (MOC) process is applicable to new procurement, as-built drawings or schematics, trainingon maintenance and/or operations associated with this endeavor, certification of any operational rules, agreements and maintenance and repair/training manuals that it may encompass.

The DTPW OSS will review all aspects of the proposed rail/bus system development or modification including thefollowing:

- Operational safety impacts
- Customer safety impacts
- System safety requirements
- Employee safety training requirements
- System hazard elimination/control. All system changes introduced into the system shall be evaluated and theirassociated risks shall be of an "acceptable" level. This includes the documentation of the risk and any appropriate tracking of actions for resolution.

The Miami Dade Transit Policy & Procedure (TAP), Change Review Board, establishes a formal method to authorize, control, implement and record changes to the as-built and safety certified configuration of Metrorail, Metromover and Metrobus equipment and facilities. The Rail and Bus Change Review Boards (RCRB, BCRB) meet periodically to evaluate proposed changes to the system. This forum ensures configuration control as well as system safety considerations in modifications that may be less comprehensive in scope, e.g. items not requiring fullscale safety certification.

The system modification process at DTPW is designed to evaluate and mitigate the impact changes will have on the people, procedures, equipment, and environment of the system, affected by the change. The safety concerns for any ofthese changes will be addressed and resolved, prior to initiation of the change, or implementation within the system.

The Metrorail/Metromover/Metrobus as-designed configurations for rolling stock, parts, equipment, systems, subsystems, facility structures, mechanical/electrical systems and equipment, shall be maintained through implementation and documentation of maintenance and repair activities. Any changes to the configuration shall beaccomplished only through formal and approved change documents, which are retained to ensure that the approvedsystem configuration is recorded and maintained.

The Project Delivery and Transportation Planning and Policy Divisions will support Metrorail/Metromover/Metrobus operations throughthe Planning, Engineering and Construction Sections. Engineering and Construction will provide design and construction support for modifications to DTPW facilities, or for new DTPW facilities, as required. Engineering and Construction will develop the configuration management system for all capital projects to support the DTPW transit system. Project configuration management requirements are specified in the DTPW Configuration Management Control for Transit Capital Projects SOP (PR-EN-005).

III 4.1 Management of Change (MOC) Authority

The DTPW Director has the responsibility for controlling and ensuring safety certification of changes to the as-built configurations of Metrorail, Metromover and Metrobus equipment and facilities. A systematic process for proposing, evaluating and reviewing, testing, and documenting changes to as-built configuration or modifications thereof, shall be employed to comply with Federal, State and DTPW laws, rules and regulations, and associated requirements as promulgated by the DTPW PTASP.

The responsibility for implementing and enforcing MOC processes falls under the authority of each DTPW executive and manager. Responsibility for change approvals falls under the authority of the DTPW Change Review Committee, which is comprised of a group of experienced design, maintenance, and operational personnel from Metrorail, Metromover, Metrobus and Capital Projects Departments, as necessary.

III 4.2 MOC Process

The Change Review Board Policy and Procedure, shall specify the authority to make configuration changes, process for making changes and formally notifying appropriate DTPW Divisions, extent of documentation and approvals required to involve a Change Review Board (CRB) and Temporary and Engineering Change documents. DTPW has two CRBs, one for Metrobus (BCRB) and one for Metrorail/Metromover (RCRB). These boards have the responsibility to review and authorize testing of proposed changes to the as-built configurations by means of Temporary Change Notices (TCN). Upon review and evaluation of test results, the Change Review Boards shall be responsible for making recommendations to implement the proposed change. A Change Notice (CN), authorized by the Change Review Boards and recommending implementation, shall be submitted to the DTPW Director for his/her review and approval. Field Engineering shall be responsible for initial evaluation of proposals, preparing and submitting TCNs and CNs to the CRBs. If approved by the DTPW Director, Field Engineering shall be responsible for preparation of a Field Change Notice (FCN) which authorizes affected divisions to proceed with implementing the change. Each proposed change must be evaluated to determine the impact on an existing system regarding the areas of maintenance, operations, safety, and environmental, and security effects prior to any changes.

The goal of the MOC process is to ensure that DTPW systems continue to provide a level of safety equivalent to or better than the existing system. MOC process applies to existing bus and rail services systems, vehicles, facilities, and equipment. This process is intended to prevent unauthorized changes that could compromise safety or introduce a hazard without approval.

The MOC process complies with FDOT SSO's program standard; FTA's general requirements, guidance, and circulars to ensure that safety hazards and concerns are adequately addressed in modifications to existing systems, vehicles, and equipment.

Control of documentation, minutes, and records of Change Review Boards' proceedings and distribution of TCNs, CNs, FCNs minutes of meetings, and reporting status of FCNs shall be a responsibility of the assigned Production Coordinator for Metrorail/Metromover CRB and appropriate Metrobus Production Coordinator for Metrobus CRB. The appropriate Production Coordinators shall have responsibility for serving the CRBs as non-voting secretaries and coordinators. Board membership includes Quality Assurance, Transit Design and Engineering, Facilities Maintenance, Infrastructure and Maintenance (chair), OSS, and appropriate transit operating divisions.

A formal process of Technical Design Policy Determinations (TDPD) is used to formally document deviations from established design criteria for new equipment and system expansions. This TDPD process is an engineering/design tool whereby a proposal to deviate from design criteria is submitted by a consultant/engineer containing the recommended course of action with the technical analysis and justification statement. Sign-offs shall be required from technical DTPW personnel of the appropriate disciplines, the CSSO and the Director, DTPW, before the TDPD is implemented.

III 4.3 MOC Action Considerations

The Change Review Board will consider, at minimum, the following issues when evaluating an MOC action for approval:

a. Safety issues or hazards associated with the changes, including impact to safety-functional or safety-critical hazard mitigation processes
b. Environmental compliance issues
c. Security issues new or modified maintenance concerns
d. Operational impacts of the change
e. Impact on operating rule book or standard operating procedures
f. Impact on public
g. Impact on personnel
h. Impact on other systems, including Train Control systems
i. Funding source
j. Schedule for implementation
k. Effect on safety certification process and Critical Items List (CIL) based on the DTPW Material Management Transit Administrative Policy (TAP) POL-MM-004, Inspection of Safety Critical Parts.

III 4.4 MOC Log

The DTPW Document Management Unit (DMU) promotes the efficient, effective and economical management of all records in connection with the transaction of official transit business. Records management seeks to control and manage records throughout their life cycle, from their creation through active use, inactive storage, and final disposition via the CARA (Content, Authoring, Review, & Approval) browser based application which allows end-users, regardless of their location, access contents online in standard formats. The DMU will provide trainingsupport to DTPW staff to assist in coordinating standards, procedures and techniques for efficient and economical record retention and storage.

III 4.5 Notifying Divisions

The Change Review Board Coordinator will send an electronic approval and verification document to ensure notification to and coordination with affected divisions. The document will provide the review of the action and recommendations to the division representative. The designated division representative will sign off on the document.

III 4.6 MOC Approval and Verification Document

The management of change process for each action will be filed in the Change Review Board files with an approval and verification document as per the Change Review Boards Policy and Procedure. Coordination, approval, and verification signatures will be completed at the appropriate time during the process.

III 5 Configuration Control

The Metrorail/Metromover as-designed configurations for rolling stock, parts, equipment, systems, subsystems, facilitystructures, mechanical/electrical systems, and equipment shall be maintained through implementation and documentationof maintenance and repair activities. Any changes to the configuration shall be accomplished only through formal and approved change documents, which are retained to ensure that the approved system configuration is recorded and maintained.

The Change Review Boards Policy and Procedure, shall specify the authority to make configuration changes, process for making changes and formally notifying appropriate DTPW Divisions extent of documentation and approvals required andinvolve a CRB and Temporary and Engineering Change documents. DTPW has two CRBs, one for Metrobus (BCRB) and one for Metrorail/Metromover (RCRB).

The DTPW Planning, Engineering and Construction Division will support Metrorail, Metromover and Metrobus operations through the Planning, Engineering and Construction Sections. Engineering and Construction will providedesign and construction support for modifications to DTPW facilities, or for new DTPW facilities, as required.

Engineering and Construction will develop the configuration management system for all capital projects to

support theDTPW system and coordinate new systems or extensions before they are implemented in the existing operating environment. Project managers employ the Project Management Plan (PMP) to guide major capital project developmentand implementation. Capital project configuration management requirements are specified in the DTPW Configuration Management Control for Transit Capital Projects SOP (PR-EN-005). DTPW has also developed a departmental Configuration Management Plan to be used as guidance to manage and control the configuration process.

Smaller projects may include an abbreviated PMP specific to the project. Representatives from each involved division and safety are represented. Notification of project changes to existing structures or facilities, which might have potentialsafety or security impacts, to effected DTPW personnel is critical. Additionally, public, or other effected groups shall benotified of any change which might have potential safety or security impacts. Effected personnel are invited to participate in project meetings and coordinate any changes. Additional training may be required. Operations and maintenance procedures, bulletins or SOP's may need to be developed. The general public may be effected. The DTPWAdvertising and Media Relations Division will assist with communications to outside agencies or effected groups and isan essential element of communication which must take place from the beginning of any project and at various stages ofa project through completion and implementation of services impacted by a project. Any negative or hazardous impacts observed by a change must be reported to management personnel as soon as possible.

The current configuration management process always asks if any modifications to the design criteria are required. If so,changes are vetted through the Engineering Change Board (ECB) and incorporated into the next update of the criteria.

III 6 System Safety and Security Certification

III 6.1 Safety Certification

This section describes DTPW's System Safety and Security Certification process used to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for New Starts and subsequent major projects to extend, rehabilitate, or modify an existing system, or to replace vehicles or equipment. A guiding principle of the certification process is the verification that safety and security-related requirements are incorporated into a project, thereby demonstrating that it is operationally ready for revenue service.

DTPW's *Security* and *Emergency Preparedness Plan (SEPP),* integrates the process for managing threats and vulnerabilities into the safety certification process.

Safety certification takes place throughout a project. It begins at the initiation of design of a project, is carried through construction, mitigating hazards in the process, evaluated during start up and testing, and transitioned into operations.

III 6.1.1 Safety and Security Major Capital Project Plans and Documents

The following documents guide the safety certification process during major capital projects:

Project Plans (with Safety Input)	Abbreviation	DTPW Owner
Project Management Plan	PMP	Project Manager
Quality Assurance Program Plan	QAPP	Chief of Quality Assurance
Safety & Security Certification Plan	SSCP	Project Manager
Safety & Security Mgmt Plan	SSMP	Project Manager
Preliminary Hazard Analysis	PHA	Project Manager
Operational Hazard Analysis	OHA	CSSO
Construction Emergency Mgmt & Response Plan	ERP	Contractor by Project
System Integration Test Plan	SITP	Contractor
Rail Service Plan	RSP	Rail Ops
Construction Safety Program Manual / Program Manual	CSPM/ CSSP	Contractor
Document Control Plan	DCP	Capital Projects
Rail Fleet Management Plan	RFMP	Project Manager
Bus Fleet Management Plan	BFMP	Project Manager
Operation & Management Plan	O&MP	Project Manager

III 6.2Hazard Analysis

Risk analysis during the project's design safety reviews provides the basis to develop a preliminary hazard analysis (PHA) for the project. This PHA, typically maintained in a log for the project, identifies hazards and potential hazards along the corridor, at platforms and in park and ride lots. The hazards are rated based on the risk analysis matrix (see section II1.4.3), and possible solutions to these hazards are proposed. The solutions are then evaluated and incorporated into the design to mitigate or reduce the hazards to the maximum practicable extent.

Similarly for security aspects of the project, and the DTPW system as a whole, a threat and vulnerability analysis (TVA) is conducted on each project. Elements identified in the TVA that can be designed out of thesystem are incorporated into the construction of the project.

During the initiation of testing and systems integration, additional operating hazards are identified and incorporated into the hazard analysis matrix. This is the start of a transition from a PHA to an operating hazards analysis (OHA). Resolutions to these hazards are incorporated into the construction or testing efforts, or a procedure for operations is written to be used during operations.

At the completion of systems integration testing, and prior to pre-revenue operations, the PHA/OHA is reviewed to determine all the hazards that have been eliminated, mitigated, or accepted. The solutions implemented (design, rule, procedure) are noted on the matrix. The OHA remains active throughout pre-revenue and 90 days into revenue operations. The remaining hazards, not mitigated or accepted after 90 days, will be incorporated into the hazard log for that mode of transit (Metrorail, Metromover, Metrobus) to be tracked and resolved in the hazard management process.

III 6.3 Project Safety and Security Certification

Safety is of paramount importance throughout the design and development of the Metrorail system. Organizational safety interfaces existed during design, construction, integrated testing, start-up and pre-revenue operations.

The CSSO will perform a safety oversight role for all future major modification to, or extensions of, the DTPW Metrorail System. In this role, the CSSO is responsible for implementation of the Safety Certification Program. Procedures and policies laid out in the DTPW Safety Certification Program Plan (SCPP) shall be adhered to. The DTPW Director must approve any revisions to the SCPP. The FDOT shall participate in the development of the SSCP.

In accordance with this PTASP, the Director, DTPW issues safety certification for all fixed guideway system new starts, extensions, rehabilitations or modifications of the existing system, or to replace vehicles and equipment. The DTPW Director, will have ensured, through the activities of the CSSO, that all elements described in the SCPP have been performed prior to the introduction of the aforementioned items into passenger service for that time period of annual safety certification.

To accomplish this, the Design Builder’s Safety Certification Engineer provides support in verifying that certification checklists are completed, thereby certifying that safety-related design was achieved and constructed.

During integrated testing, appropriate DTPW personnel witnessed selected safety-related integrated tests. DTPW OSS personnel are active participants in emergency drills, safety certification audits, review of rules and procedures; and evaluation of training for operators, maintainers, and fire and police personnel.

The DTPW SSCP documents the DTPW Safety and Security Certification (SSC) Program for new starts, extensions, safety-significant rehabilitation or modification of the existing fixed guideway system(s). The SSCP identifies the procedures and activities that will be conducted to ensure that certifiable levels of operational safety are incorporated in the Miami-Dade County Fixed Guideway Transit System extensions and/or new Start System Elements prior to the implementation of scheduled passenger service. The SSC Program is part of the DTPW Safety and Safety Certification Program since 1984. Background information on the development of the DTPW Certification Program is provided. A Safety Certification Program overview section displays the program goals and control.

The detailed methodology for the conduct of the Safety and Security Certification Program is described in Section 3 under the six separate procedures outlined below:

- Procedure No. SC1, Develop Design Requirements: Verify Incorporation in Drawings and/or Specifications
- Procedure No. SC2, Contract Compliance
- Procedure No. SC3, Operation, Maintenance and Test Procedures; Rules and Training
- Procedure No. SC4, Integrated Testing
- Procedure No. SC5, Pre-passenger Operations
- Procedure No. SC6, System Certification

Procedure SC1. Develop Design Requirements: Verify Incorporation in Drawings and/or Specifications will be conducted for each of the nine functional system elements involved in the design, addresses the verification that pertinent safety and security requirements have been incorporated in applicable design drawings and specifications.

The final product of the conduct of Procedure SC1 will be documentation of findings and conclusions, and actions for resolution of identified Open Items. Open items identified during the conduct of SC1 and subsequent procedures will be resolved by:

1. Corrective Action (closed), or
2. Retention (use as is), through:
   a. Temporary Retention - deferral of corrective action with or without an alternate -with rationale, or
   b. Retention - with retention rationale.

Procedure No. SC2, Contract Compliance, will address:

1. Completion of the SC2 Procedure prior to the start of an integrated test(s) for those contracts involved in the test.
2. Procurement, Installation, and Construction Contracts.
3. The incorporation of safety and security requirements, identified in the conduct of Procedure SC1, under pertinent contracts, in the construction/assembly of the specific system element or part thereof.
4. The review and safety/security verification of miscellaneous procurements and installations.
5. The identification, tracking and resolution of Open (safety- and/or Security- critical) Items, both carried over from the conduct of the SC1 Procedure and those stemming from the conduct of the above activities.

Periodic reports will be provided to the DTPW Certification Review Committee on the status of SC2 activities, and the current status of previously identified Open items. Open Items status reports will be prepared for action by the Certification Review Committee.

Procedure SC3. Operation, Maintenance and Test Procedures; Rules and Training will identify personnel requirements that are required to test, operate, and maintain the system, system element or subsystem. The conduct of this procedure will involve:

1. Integrated Test Procedures
2. Operation and Maintenance Rules and Procedures
3. Procedural alternate(s) [Work-arounds] to Open Items
4. Personnel Training

Periodic reports will be provided to the Certification Review Committee on the status of SC3 activities, including the status of Open Items identified in this and prior Procedures.

Procedure SC4. Integrated Testing, will be conducted for the entire Fixed Guideway Transit System or for individual Phases/Sections thereof, specific to the element, extension, or modification to be certified, and will

address:

1. Completion of an SC3 Procedure, pertinent to the integrated test(s) to be conducted and prior to the start of the Pre-passenger test(s).
2. The review and safety verification of Integrated Test Reports.
3. The identification and resolution of Open (safety/security-critical) Items, carried over from the conduct of prior procedures, and those stemming from the conduct of the SC4 activities.

Periodic reports will be provided to the Certification Review Committee, including the current status of SC4activities and the Open Items.

Procedure SC5. Pre-passenger Operations and SC6. System Certification will be conducted concurrently for the Fixed Guideway Transit System or for individual Phases/Sections, extensions or modifications thereof, and will address:

1. Completion of the Safety Certification Procedures SC1 through SC4 with the Certification Review Committee concurrence prior to initiation of regularly scheduled passenger service.

2. Procedure SC5 will address:

    a) Review and Verification of Pre-passenger Operations Test documentation.
    b) The identification, tracking and resolution of Open (safety/security-critical) Items carried over from prior Procedures and any resulting from Pre-passenger Operations Tests.

Procedure SC6 will address: The preparation of the Safety Certification Report to summarize the conduct of the Safety and Security Certification Program, and to identify related documentation to support Safety and Security Certification by DTPW. All transmittals to local, State or Federal Authorities will be prepared under this Procedure.

III 6.4 Quality Assurance

All capital projects at DTPW require a Quality Assurance and/or Quality Control (QA/QC) requirement built into the design and construction bid documents. The DTPW Quality Assurance Division (QAD) is responsible for providing the QA/QC requirements for all design and construction bid documentation. The QA/QC requirements generally include some or all of the quality elements identified in the Federal Transit Administration (FTA) Quality Management System Guidelines. On all major capital projects, the DTPW QAD is responsible for the development of the DTPW Quality Assurance Program Plan (QAPP) and for scheduling the QA audits during the design and constructions phases of all major projects.

III 7 Rules Compliance

III 7.1 Rail Services Rules Compliance

III 7.1.1 Documents and Publications

The DTPW OSS shall ensure that the DTPW Operations develops, adopts and complies with the PTASP in accordance with the established criteria set forth in the SSO through the following programs:

1. Annual internal audits by the DTPW OSS (of Operations and Maintenance rules and procedures according to standards set forth in SSO.)
2. Assessment of the implementation of Operations and Maintenance procedures, Metrorail and Metromover, by DTPW Operations Management for employees through procedure review meetings, safety meetings, and refresher training.

According to the current, fourth edition of the DTPW Metrorail Operation Rules and Procedures Manual, the Policy Section, the DTPW Rail Transportation Division shall be responsible for ensuring that operating rules and procedures are carefully developed, maintained, followed, and revised as deemed necessary. The General

Superintendent, Rail Transportation chairs the Metrorail and Metromover Rule Book Committees, which develop and update rules and procedures and conduct annual reviews of rules, procedures, and test operations. The Metrorail Rule Book Committee shall meet annually to review and revise, as necessary, current Rail Services Special Orders, Procedure Notices, and Bulletins.

Changes to the rules require review and approval by the Metrorail/Metromover Rule Book Committees and appropriate DTPW management. DTPW utilizes several methods to assess the implementation of operating and maintenance rules/proceduresby employees and the effectiveness of supervision relating to the implementation of operating and maintenance rules.

III 7.1.2 Rule Compliance Checks

Metrorail/Metromover operations are conducted in accordance with rules and procedures. Each rail employee is issued a controlled copy of the DTPW Metrorail and Metromover Rulebooks. These Rulebooks include hours of service requirements for all safety sensitive employees, as defined by the FTA and a minimum operating standard equipment list (MOSEL) for rail vehicles to commence/remain in passenger service. Rail car and systems maintenance divisions also have procedures, which standardize how they maintain equipment. Managers of these respectivedivisions are responsible for ensuring compliance with those procedures. Proficiency tests (Train Operator ridechecks) are conducted on a weekly basis by the Rail Transportation Division and/or the DTPW OSS to ensure compliance with rules and procedures. Metrorail and Metromover maintenance supervisors perform weekly safety-related spot checks of employee activities. Gross or serious infractions of the rules and/or procedures are addressed immediately and other deficiencies are reported to the appropriate authority for remedial or disciplinary action.

Any irregularity, unusual/unexpected incident, occurrence, or malfunction is reported through the completion of Metrorail Unusual Occurrence forms. All cases of an accident or injury to an employee while on duty shall be promptly reported to the immediate supervisor or proper authority. Obtain first aid immediately and, if necessary, medical attention for injuries. All required reports, including a Metrorail Accident/Injury Report form shall be completed. Completed Unusual Occurrence and Accident/Injury forms shall be sent to the DTPW OSS within 24 hours of the occurrence. Any reported incidents which may introduce a safety hazard to the system shall be identified as a potential system hazard as per the DTPW hazard management program.

III 7.1.3 Reports and Data Analysis

Results of the operational tests (i.e. field observations) are compiled and reviewed by the Rail Transportation Division. The OSS performs bi-annual reviews of this data. Additional information regarding operational tests is available to the CSSO as needed on request. The OSS Compliance Safety Review SOP (PR-SS-015) outlines the requirements for the conduct of regular workplace safety reviews in the DTPW Compliance. Reviews are performed to ensure a safe working environment is maintained. These Reviews aim to identify any systematically occurring hazards in the workplace and to minimize risks to health, safety or the environment.

III 7.1.4 Enforcement

Violations

Rule violations are addressed through: coaching, retraining, and, formal discipline (i.e. counseling, suspension and termination) that may result in termination. All accidents and incidents are reviewed by supervisors and the safety administrator to determine if rules have been violated, or if revisions, changes, or additions are necessary.

Hazard Management

The CSSO may incorporate violation trends or deficiencies for any rule or procedure into the hazard management program for resolution. Hazards unresolved at the divisional level are directed to the Union Management Safety Committee for further tracking, review, resolution, and/or correction.

Non-compliant audit findings determined to be hazardous are documented in the hazard log. A date of observation, description of the hazardous condition, corrective action required, and implementation date are entered. Conditions are tracked until the hazardous condition is corrected. See the Hazard Management Program portion of the PTASP for further information.

The CSSO conducts ongoing and regular observations, reviews, and audits to determine the effectiveness of the rule compliance program.

Rail Services managers review rules and procedures regularly to determine if changes, revisions, or additions are necessary.

III 7.2 Bus Services Rules Compliance

III 7.2.1 Documents and Publications

The DTPW Bus Operations Division shall be responsible for ensuring that operating rules and procedures are carefully developed, maintained, followed and, revised as deemed necessary. The General Superintendent, Bus Transportation, chairs the Metrobus Rule Book Committee, which develops and updates rules and procedures and conducts annual reviews of rules and procedures and test operations.

Bus operations are conducted in accordance with rules and procedures. Each bus employee is issued a controlled copy of the DTPW Metrobus Operating Rules and Procedures Manual. Bus and systems maintenance divisions also have procedures, which standardize how they maintain equipment. Managers of these respective divisions are responsible for ensuring compliance with those procedures. The DTPW Metrobus Operating Rules and Procedures Manual and SOPs are maintained by the Bus Services Division and reviewed/revised annually, as necessary. Changes, additions, or revisions are circulated to all affected employees.

III 7.2.2 Rule Compliance Checks

The DTPW OSS shall ensure that DTPW Bus Operations develops, adopts and complies with the PTASP in accordance with the established criteria set forth in FAC 14-90 (including hours of service requirements and a list of minimum operating standard equipment list (MOSEL) for buses to commence/remain in passenger service), through the following programs:

1. Annual internal audits by the DTPW OSS (of Operations and Maintenance rules and procedures according to standards set forth in FAC 14-90.)
2. Assessment of the implementation of Operations and Maintenance procedures by DTPW Operations Management for employees through procedure review meetings, safety meetings and refresher training.

DTPW utilizes several methods to assess the implementation of operating and maintenance rules/procedures by employees and the effectiveness of supervision relating to the implementation of operating and maintenance rules. Changes to the rules require review and approval by the Metrobus Rule Book Committee and appropriate DTPW management.

Operational field supervisors are tasked with performing rules compliance checks and observations. Observations are conducted by operations field supervisors as a part of their daily supervisory role to determine if an employee is compliant with rules, procedures, and regulations. There is no set frequency or required number of field observations that have to be completed by Operational field supervisors on a daily basis. However, Supervisors spend time each day in the system observing and performing compliance rules observations, accident investigation, and responding to operational needs as they encounter them, etc. When an operational field supervisor observes a rules violation, the field supervisor will address the issue withthe Bus Operator immediately and complete a field report. The completed field report is then forwarded to theemployee's immediate supervisor to address and follow-up with the bus operator.

Proficiency tests are conducted on a weekly basis by the Bus Operations Division and/or the DTPW OSS to ensure compliance with rules and procedures. Gross or serious infractions of the rules and/or procedures are addressed immediately and other deficiencies are reported to the appropriate authority for remedial or disciplinary action. Any items in the rule book that may pose a safety hazard to the system shall be identified as a system hazard. Appropriate processes and techniques shall be used for hazard identification, assessment, resolution, documentation and trend analysis.

Route detours are issued (as needed) to bus operators checking out their work for the day. Bulletins, notices and memos addressing system issues, temporary changes in the operating system and changes in work duties are issued. Not all changes affect all operators; therefore, bulletins, notices, and memos issued do not require a

signature from all operators. Employees are required to sign for critical information confirming that they have received, read, and understand the written instructions. DTPW complies with all local, state and federal requirements including, but not limited to, (FDOT, FTA) rules and regulations, and programs. Any irregularity, unusual/unexpected incident, occurrence, or malfunction is reported through the completion of appropriate forms. All cases of an accident or injury to an employee while on duty shall be promptly reported to the immediate supervisor or proper authority. Obtain first aid immediately and, if necessary, medical attention, forall injuries. All required reports, including a Supervisor's Investigation Report form, shall be completed. Any reported incidents which may introduce a safety hazard to the system shall be identified as a potential system hazard and processed via the DTPW hazard management system.

III 7.2.3 Safety Rules Compliance Checks and Verification

The OSS ensures Operations and Maintenance divisions (as well as Project Delivery, Transportation Planning/Policy and Construction andAdministrative) are in compliance with the rules and SOPs within their individual divisions through the use of rules checks, verification audits and other OSS tasks which interface with those divisions. Findings from these checks are then forwarded to management for review and corrective action. The OSS Compliance Safety Review SOP (PR-SS-015) outlines the requirements for the conduct of regular workplace safety reviews in theDTPW Compliance. Reviews are performed to ensure a safe working environment is maintained. These Reviews aim to identify any systematically occurring hazards in the workplace and to minimize risks to health,safety or the environment.

III 8 Facilities, Structures and Equipment Inspections

DTPW facilities shall undergo 3 safety inspections per year. The facilities associated with the Metrorail system, such as the yard and shops, stations, and substations shall be inspected on a regular basis through both, divisional management staff and personnel from the DTPW OSS. The majority of the Metrorail divisions are housed in the Lehman Center Facility building (including the systems maintenance; vehicle maintenance; transportation; and training.) Other related facilities include: the 3rd, 4th and 5th floors of the Stephen P. Clark Center Building, which also house the Bus and Rail Central Control Facilities, the Revenue Building, the Metromover Maintenance building in which Metromover maintenance functions are performed and the 3 Metrobus maintenance Divisions: Northeast, Central and Coral Way.

Facilities safety inspections are closely related to the Hazard Management Process (Section 6) because those personnel who conduct facility inspections will often discover hazardous conditions. As conditions shall be noted by the maintenance division, field supervision, or train operators at DTPW properties, they are reported to the Rail Central Control Facility (RCCF) who makes notification to facilities maintenance. The DTPW Facilities Maintenance Division Equipment and Maintenance Plan specifies the processes and practices by which DTPW establishes proper maintenance of facilities, machinery and equipment. The DTPW Elevator/Escalator permitting and Certification Procedure (PR-FA-004), specifies inspection and testing requirements in order to obtain certificates of operation for DTPW elevators/escalators.

Pre-departure and routine inspections, in addition to supplier-designed preventive maintenance programs, help ensure that no vehicle enters revenue service with critical safety-related faults. Procedures shall be established by DTPW Rail/Bus Services Management, in the form of a maintenance plan, to ensure the tracking and resolution of identified problems during inspections.

Maintenance practices originate with suppliers' Maintenance and Repair Manuals with prescribed Maintenance schedules and frequencies. A maintenance record logging maintenance performed and history is maintained on each transit vehicle. Maintenance procedures are incorporated into the overall maintenance program. All major equipment has operations and maintenance manuals that are used for inspections and during employee training.

The DTPW OSS shall follow up on those items that are significant, and follow the procedures stipulated in the Hazard Management Process, and conduct or oversee the internal audit process to determine compliance with maintenance plans and procedures. The audit process shall include a means of determining required maintenance activities are performed and that proper corrective actions are prescribed, implemented, and tracked as part of the process.

III 8.1 Facilities and Equipment to Be Inspected

The DTPW OSS shall establish a list of facilities, physical equipment and rolling stock, such as lathes, grinders, vehicle lifts, railings, etc., subject to inspection and tests and shall perform or ensure the performance of all required inspections and safety-related tests of facilities, equipment, rolling stock, operations, and maintenance are coordinated and performed when required. The DTPW OSS shall maintain inspection lists, forms, and criteria for performances of tests and inspections. The tests and inspections will be performed using techniques such as guidelines, criteria, procedures, and checklists to improve the effectiveness in identifying deficiencies or items requiring corrective action. The following criteria/actions are established for inspections and tests as required:

1. Developing a list of facilities, physical equipment and rolling stock subject to inspection and tests.
2. Developing a policy and schedule for system safety tests and inspections.
3. Developing and maintaining forms and criteria for the performance of tests and inspections.
4. Identifying requirements for safety tests and inspections.
5. Reporting findings and recommendations resulting from safety tests and inspections to appropriate DTPW management.
6. Inclusion of any identified hazards in the hazard management process.
7. Performing follow-up inspections to determine compliance with findings and recommendations.
8. Evaluating the effectiveness of safety tests and inspections of regularly scheduled rail facility inspections that have been conducted and documented.

Inspection reports shall include the following:

- Date of Inspection and Name of Inspector
- Name of Facility or type of equipment/rolling stock inspected
- Listing of Items Observed
- Description of Observed Deficiencies
- Recommendations to Improve Safety

Other types of inspections include:

- Machinery/Equipment – grinders, wheel truing machine, etc.
- Exterior conditions
- Building facilities – HVAC, electrical, boilers, hoists, overhead cranes
- General housekeeping
- Fire extinguishers
- Fire suppression systems including sprinklers and Halon
- Fire alarm systems

The OSS conducts the following inspections twice per year:

✓ Metrorail: Maintenance (Lehman Center)
✓ Metromover: Maintenance (Metromover Maintenance Building)
✓ Other Rail Areas: (Operations, Admin., Stores) (5 locations)
✓ Metrobus: Maintenance (4 locations)
✓ Other Bus Areas: (Operations, Admin., Stores) (5 locations)

Fire/Life Safety Inspections conducted annually:

✓ All Metrorail Stations (23 locations)
✓ All Metromover Stations (21 locations)

OSS personnel shall utilize the DTPW OSS Facility and Rail/Mover Station Inspection checklists while surveying the DTPW facility. The processes utilized for the identification of facilities and equipment subject

to regular safety-related inspection and testing, techniques used to conduct inspections and testing, inspection schedules, and procedures for and description of how results are entered into the hazard management process are specified in the DTPW OSS Rail and Mover Station and Facility Safety Inspection Standard Operating Procedures .

Certain facility inspections (such as the Halon systems inspections, and the sprinkler inspections) are frequently contracted out. All fire systems are currently monitored by outside contractors, who check for alarms and coordinate with appropriate DTPW staff. Fire systems associated with the Metrorail and Metromover lines are also monitored by the Rail Central Control Facility. Temporary measures (to protect life and property) are mandated immediately should corrective action for a serious deficiency be delayed for any reason. Examples of such measures include shut downs, evacuations, notifications, or signage advising of present conditions.

The DTPW OSS will participate with Facilities Maintenance and Rail/Bus Services Division representatives in facility inspections to identify and document compliance with local, State and Federal regulations regarding safety and environmental issues, and provide assistance to control hazards. All items identified as non-compliant shall be taken into account as an identified system hazard. Facilities-related hazards are corrected and tracked through repair work orders created by the DTPW Production Coordinators. The formal processes and techniques shall be used for hazard identification, assessment, resolution, documentation and trend analysis.

At specified intervals, managers and safety staff shall inspect Metrorail/Metromover stations, substations, office buildings, and other DTPW facilities. Metrorail/Metromover station safety inspections include items such as platforms, lighting, railings, signage, stairways and handrails, ramps, escalators, fencing, retaining walls, seating, etc. Discrepancies will be reported as discussed above and CAPs (if developed) will be trackedto closure by the OSS.

Operating facilities and equipment routinely inspected and tested by employees, supervisors, management, and safety and environmental personnel include the following:

a. Bus and rail maintenance/support shops/administrative offices, and equipment within the shops
b. Fire system equipment
c. Safety eyewash and shower systems
d. Floor and portable hoist systems and cranes
e. Heating, air conditioning, lighting, and ventilation systems
f. Hydraulic presses, grinders, welders, wheel-truing equipment, lathes, etc.
g. Hazardous materials handling and storage, etc.
h. Metrorail trains, passenger cars, Metromover vehicles, and buses
i. Support equipment (i.e. rolling stock) including high-rail vehicles, track maintenance vehicles, bucket trucks, loaders, forklifts, aerial lifts, etc.
j. Infrastructure including rail station platforms, track, switches, bridges, grade-crossing equipment, etc.

III 8.2 Techniques, Schedules, and Procedures

Preventative maintenance inspection schedules are generated through the computer system per equipment manufacturer's guidelines and recommendations, and as required by local, state, and federal regulations. A maintenance supervisor identifies upcoming PM inspections and assigns the work out to their crew for completion. Inspectors use checklists to identify potential physical hazards, unsafe equipment, unsafe acts, and policy and procedural deficiencies with the facility or equipment being inspected. Completed inspection reports and checklists are returned to the supervisor for review. Each division is responsible for maintaining inspection and repair records to confirm the inspection process.

III 8.3 Tracking and Resolving Hazards Identified During Inspections

The majority of safety hazards and concerns are resolved immediately by employees, and supervisors, and require no formal tracking process. Safety-critical hazards that cannot receive immediate attention are forwarded to the appropriate supervision and will be reported to the CSSO or safety committee. An observed safety critical hazard that cannot be corrected in a timely manner will be entered into the DTPW Hazard Log for tracking purposes. A CAP, responsible person, and completion date will be assigned. Follow-up inspections will verify that the hazard has been resolved.

III 8.4 Rail Bridge Safety Management and Inspection Program

The elevated guideway is treated as a bridge, subject to biennial structural inspections (including visual inspections of all structural elements and reporting of conditions for prioritized repairs) per Florida State Statute 335.074, Safety Inspection of Bridges. The running rail system is inspected for physical deterioration, fastening system integrity, and rail-to-ground resistance. Passenger stations are inspected for verification of fire/life safety features.

The Construction and Bridge Inspection Division personnel have the responsibility to manage and inspect all rail bridges in accordance with 49 CFR Part 237, Bridge Safety Standard. The Construction and Bridge Inspection Division will assure that each structure is scheduled, inspected, and any repairs or upgrades need to take place. Prior to all inspections, personnel will obtain access via the DTPW Track Allocation process. Personnel will be current in training for Roadway Worker Protection and fully implement all necessary safety procedures during the performance of bridge inspections. The DTPW OSS verifies, through the internal audit process, the safe performance of bridge inspection program.

III 9 Maintenance Audits and Inspection Program

III 9.1 Equipment or Facilities Maintenance Audits and/ Inspections

The DTPW OSS shall conduct or oversee the internal audit process to determine compliance with maintenance plans and procedures. The audit process shall include a means of determining required maintenance activities are performed and that proper corrective actions are prescribed, implemented and tracked as part of the process specified in the OSS Internal Safety and Security Audit Procedure. Deficiencies discovered during internal audits, performed by the DTPW OSS, shall be detailed on the audit checklists and a plan of corrective action, including responsible persons and timelines, is agreed upon with appropriate management. These action items shall be specified on a CAP Log maintained by the OSS. As items are corrected, those corrections shall be noted on the log and closed out as appropriate. The DTPW OSS shall review these items on an ongoing basis, including a monthly submission of the log to the SSOA, and when unacceptable delays are encountered in resolution, the items are escalated to appropriate senior management for assistance in resolution. Identified problems will be processed as defined in the SSPP Hazard Management Process.

The DTPW maintenance audits/inspections provide top management with a mechanism for documenting the fact that key elements of the organization are effectively performing specified functions. These organizational elements shall include all DTPW maintenance plans and procedures including preventive maintenance activities, scheduled maintenance, and unscheduled maintenance procedures. Maintenance Inspection and Repair activities occur for Systems, Vehicles and Facilities.

Systems maintenance includes track, traction power substations, train control, and communications. Track maintenance typically includes measurements of track gauge, profile, alignment, cross level, twist and wear, flaws. Power inspections typically include replacement of breakers, substation battery tests, and substation maintenance. Signals maintenance typically includes testing of signal equipment such as switches, relays, track circuits and wiring. Vehicle maintenance typically includes the inspection, maintenance and repair of rolling stock by performing scheduled maintenance inspections and running repairs. The vehicle maintenance program shall be delineated in separate Metrorail, Metromover and Metrobus Fleet Management Plans. The Plans are revised to incorporate industry experience and manufacturer recommended maintenance and has been routed for approval.

Frequencies of preventive maintenance by equipment type shall be tracked by appropriate Production Coordinators, keepers of the central maintenance management system for DTPW. Pre-departure and routine inspections, in addition to supplier-designed preventive maintenance programs, help ensure that no vehicle enters revenue service with critical safety-related faults. Procedures shall be established by DTPW Rail/Bus Management in the form of a maintenance plan for tracking and resolving problems identified during inspections. In addition, DTPW facilities and equipment are routinely inspected to verify compliance with applicable regulations and occupational and fire/life-safety requirements.

III 9.2 Audits of Maintenance and Operations Activities

Managers and/or Supervisors verify that maintenance procedures are performed. Annually (as part of a 3-year cycle), DTPW conducts internal audits to verify that this process is taking place. Additionally, FDOT (SSO) monitors internal audit processes to assure that the internal audit process is occurring. This preserves the independent nature of the audit process, since other organizational units are primarily involved with implementation of the audit items. Managers and supervisors of the areas being audited are invited to attend the audit; however, they do not conduct the internal audit. Other organizational units are required to cooperate with the rail/bus supervisor or other designee in the conducting of internal audits.

III 9.3 Audit Report—Tracking and Resolving Internal Audit Findings

The internal auditor will schedule and conduct internal audits. FDOT is invited (with 30 day notice) to participate in the audit functions. Upon completion, the internal audit team conducts a meeting with appropriate DTPW Division heads to discuss internal audit findings and a follow-up email is sent to summarize meeting items. The final internal audit report will include findings and recommendations. A summary of all internal audits performed during the year will be included in DTPW's annual report to FDOT. Reports to FDOT will include CAPs for hazards identified.

III 9.4 Follow-Up /Action Plans

Divisions and other organizational units are responsible for implementing their respective approved recommendations and CAPs within established time frames. Future audits will determine compliance with this requirement.

III 9.5 Resolving Problems and Disagreements

Disagreements with audit findings may be challenged by the division supervisor or manager to the internal auditor or audit group. A review of the requirements and findings/non-conformances will be made. A written reply must be made within 30 days. If a disagreement still remains, the issue will be elevated to the CSSO. A full review of the findings and disagreements will be presented at that time. The CSSO will make a decision for an equitable resolution.

III 9.6 Use of a Written Checklist

Written checklists are the preferred tool of conducting an audit. Written checklists of internal audit requirements will be used when conducting all internal audits and or evaluations. The auditor will make every effort to make certain that the division manager has received a copy of the checklist prior to the audit. If areas of concern arise that are not written on the checklist, and need to be investigated, the auditor may write the questions and make it a written part of the audit process. When a final report is given to the manager, a written record of questions or issues will be given to the department manager. Written checklists aid the department manager in knowing the expectations of regulations and the auditor prior to the audit experience.

III 9.7 Tracking and Resolving Hazards or Concerns

Findings identified during inspections may be repaired immediately, if the situation allows it, by on-site employees and supervisors. Safety critical hazards that cannot receive immediate attention will be noted on the inspection checklist. Items on this list are forwarded to the appropriate level of supervision. Those inspecting the same area or equipment in the next cycle should maintain the list for follow-up. These findings should result in a work order being written for each item. This will allow the work order system to track the finding until it is

resolved. An observed safety critical hazard that cannot be corrected in a timely manner will be entered into the DTPW Hazard Log. A CAP, responsible person, and estimated completion date will be assigned and follow-up inspections will verify that the hazard has been resolved.

The majority of safety hazards and concerns are resolved immediately by employees and supervisors, and require no formal tracking process, other than the inspection checklist to show issues have been resolved. Some hazards or concerns that are not resolved in a reasonable manner or that involve other divisions or require management review, are reported to the Union-Management Safety Committee (UMSC). If the matter is not resolved at this level, that it is referred to the DTPW Labor Management Committee (LMC).

III 10 Drug and Alcohol Program and Medical Monitoring

III 10.1 Drug and Alcohol Program

DTPW strives to promote the safety of mass transit operations by prohibiting the use of certain drugs and the misuse of alcohol by employees who perform safety-sensitive functions. DTPW employees are our most valuable resource. DTPW shall establish a healthy, satisfying work environment that promotes personal opportunities for growth. As one of the steps necessary to meet this goal, DTPW shall establish policy to:

- Assure that employees are not impaired in their ability to perform assigned duties in a safe, productive, and healthy manner;
- Create a workplace environment free from the adverse effects of drug and alcohol substance abuse and misuse;
- Prohibit the unlawful manufacture, distribution, dispensing, possession, or use of controlled substances; and
- Encourage employees to seek professional assistance anytime personal problems, including alcohol or drug use and misuse, adversely affect their ability to perform their assigned duties.

In accordance with the Federal Transit Administration (FTA) regulations entitled Prevention of Prohibited Drug Use in Transit Operations (49 CFR, Part 655), and to meet the goals set forth above, DTPW shall establish:

- An alcohol misuse prevention program in which safety-sensitive employees are tested for the misuse of alcohol and supervisors are authorized to make reasonable suspicion testing determinations and are trained to recognize the signs and symptoms of alcohol misuse; and
- An anti-drug program to detect the use of prohibited drugs by urine testing and to deter the use of those drugs by educating and training safety-sensitive employees about the safety and health ramifications of drug use and abuse.

Implementation details shall be contained in the DTPW Drug and Alcohol Testing Policy Handbook, and are in conformance with 49 CFR, Parts 40 and 655, as amended. This program shall be administered by the Human Resources Department, through job classification induction and refresher training requirements and audited for compliance by the DTPW OSS through the internal audit process. The DTPW OSS shall perform internal safety audits on a 3-year cycle, and one of the areas audited for safety compliance is Drug and Alcohol. Furthermore, the DTPW OSS shall review any updates to the Handbook.

III 10.2 Medical Monitoring

Applying appropriate medical standards for safety-critical positions extend beyond a qualifying pre-employment examination. DTPW has established ongoing standards for employees who perform safety-critical functions. Medical monitoring of employees whose conditions or physical and emotional health may not be acceptable in order to operate transit vehicles includes Metrobus and Metrorail operators. Biannual physical examinations are required for each of these employees. Standard DOT physicals are performed with emphasis on vision, hearing, weight, drug screening, diabetes, blood pressure vitals, sleep apnea, and a physical exam by a physician. Employee's emotional health is evaluated using the County's Employee Assistance Program provider. This program allows for 24 hours-a-day, 7 days-a-week availability for employee evaluations or counseling. Evaluations include alcohol/drug abuse, marital matters, personal problems, mental health, financial issues, legal difficulties, and stress/anxiety matters.

III 11 Procurement

III 11.1 Measures and Controls for the Procurement Process

The DTPW Contracts and Procurement Division shall be responsible for the procurement of materials, services, and public works. Client Divisions shall provide DTPW Contracts and Procurement Division or Strategic Procurement Department (SPD) a scope in compliant with DTPW quality standards, established user department work schedules and needs, and governing laws and regulations. Procurement shall include these requirements on subsequent sourcing events and executed contracts accordingly. Generally, specifications are in the form of written description, performance requirements, drawings, prints, commercial industry standards, and other descriptive literature references. All items to be procured shall be reviewed for health and safety compliance with current applicable regulatory specifications by the client.

Stores purchase requisitions of stock items with minimum/maximum quantities are automatically generated using an operating index code by Enterprise Asset Management System (EAMS) and sent to the Inventory Control Manager electronically for approval. Prior to approval, the Inventory Control Manager will verify if the item(s) are listed on the force account list, provided annually by DTPW Financial Services. If so, the Inventory Control Manager will type "yes" in the federal reimbursement field in EAMS indicating federal reimbursement.

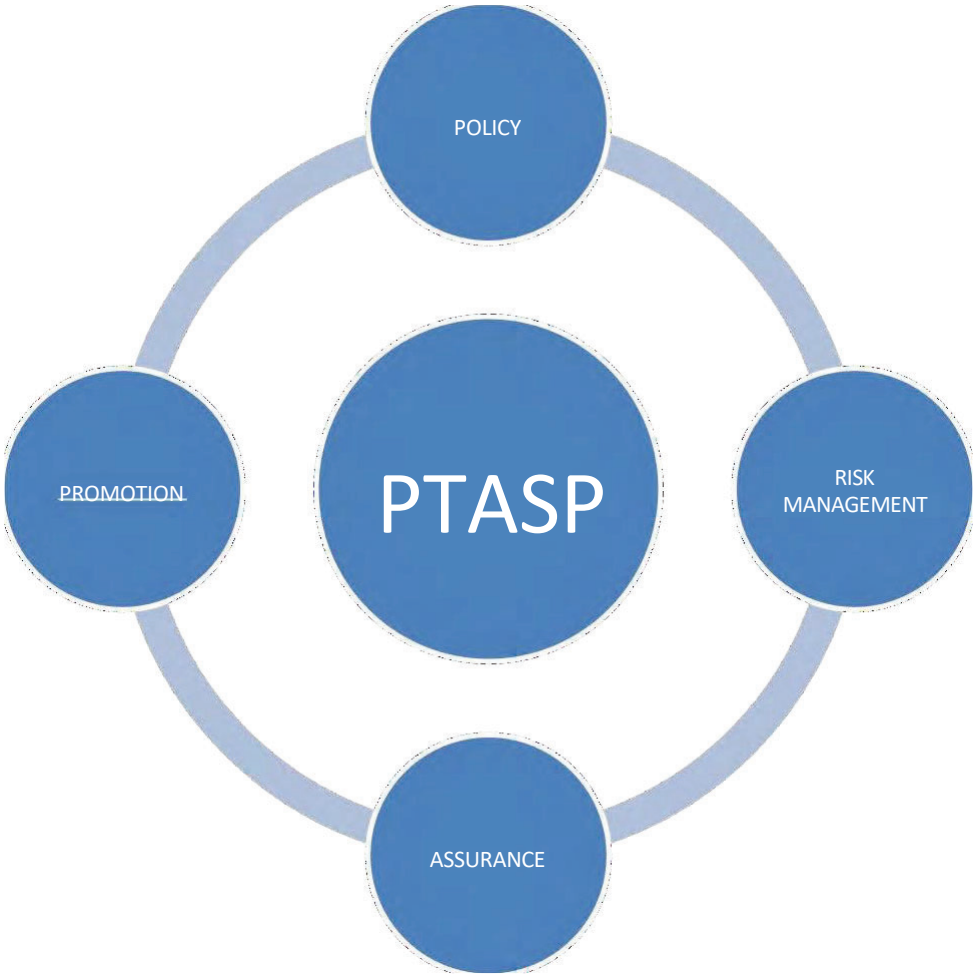
Requestors of services from DTPW Purchasing shall be responsible for identifying material or services that have potential safety impacts and for ensuring that such materials or services meet safety requirements of Federal and State compliance regulations, OSHA standards, as well as identifying the requirement for DTPW OSS review. See section 19 of this Plan.

Special supplies or services may require review by the DTPW OSS. All chemicals shall require Safety Data Sheets (SDS) review by the user division and the DTPW OSS before utilization. DTPW Purchasing shall consult with the DTPW OSS during pre-procurement planning for specialty items requiring safety review. In particular, when procuring toxic substances, DTPW vendors must supply SDSs before shipping toxic substances, as defined by the Florida State Right-to-Know Law, or defined as a hazardous chemical by the Occupational Health and Safety Administration Hazardous Communication Standard. The DTPW OSS shall perform internal safety audits on a 3-year cycle, and one of the areas audited for safety compliance is procurement.

III 11.2 Inspection and Control of Materials

The DTPW Materials Management Division maintains a safety critical parts list. Safety critical materials, equipment, and components will be inspected upon receipt, by the appropriate DTPW division. Materials, equipment, and components for which specifications require source inspection shall be subject to receipt inspection when required source inspection has not been performed or specifically waived by DTPW. All materials (with the exception of raw materials) are to be inspected by the receipt inspectors for compliance to specified requirements, completeness, transit damage and complete/proper documentation. Material that cannot be inspected at time of receipt shall be logged “Hold for Inspection” and segregated until released. Parts sent to vendors for special processing are to be inspected upon returned. Inspection of the processing performed and potential handling damage shall be performed. Measuring and test equipment and test standards sent out for calibrations, check, or repair will, upon return, be forwarded to the responsible DTPW Division for inspection. DTPW has developed a policy that provides guidance on the Inspection of Safety Critical Parts (POL-MM-004).

IV. PROMOTION



IV
PROMOTION

Pillar IV of the Public Transit Agency Safety Plan is **Safety Promotion**. This section describes the responsibilities of staff to the safety program, and encouragement of others to follow established policies. It describes the committee structure established to form the means of discussing, solving, and, if necessary elevating safety issues and concerns to resolution. Training and certifications to enhance the qualifications and competencies of DTPW staff are described, along with the reoccurring activities at DTPW designed to promote and remind all employees about safety in the organization.

IV 1 P TASP Implementation Activities and Responsibilities

IV 1.1 PTASP Committees and Position Responsibilities

DTPW implements the PTASP through a series of committees and department representatives who have responsibility for specific areas, yet work in a coordinated manner to ensure the safety of the department. As related in Section I 3.2, safety is a key responsibility of all managers at DTPW. All employees have the right to present safety concerns to their immediate supervisor, manager, or safety staff. Any employee, supervisor, or manager who presents an incident, accident, safety concern, or hazard, (in good faith) will not be adversely affected, or be subjected to harassment, intimidation or discipline. These retaliations are not acceptable by DTPW.

IV 1.2 PTASP Boards/Committees

DTPW implements the PTASP collaboratively through a series of committees coordinating bus and rail operation and maintenance services. Concerns, if not resolved by the manager or supervisor, will be referred to and addressed by, the respective safety committee. The following hierarchy of committees at DTPW are established to address all safety issues.

IV 1.2.1 DTPW Executive Committee

As part of the DTPW Executive Committee (EC), the System Safety Program, the PTASP and its implementation will be evaluated, as determined by the Chief Safety Officer. This board consists of the following executives:

Director & CEO, DTPW
Chief Transit Operations Officer
Chief Administrative Officer
Chief Project Delivery Officer
Assistant Director, Bus Services
Assistant Director, Rail Services
Chief Safety Officer

The EC meets weekly and the Chief Safety Officer introduces safety-related agenda items that reflect asignificant impact to the PTASP or Miami-Dade County Departments outside the DTPW and to address DTPW safety goals/objectives and open formal corrective action plans.

IV 1.2.2 Labor Management Committee (LMC)

The Labor Management Committee is DTPW's highest level committee with safety involvement, chaired by the DTPW Director or designee. The LMC is comprised of the DTPW corporate staff, which includes the

executives, the CSSO, and the Rail/Bus Services and business unit managers. The Committee includes representation from the Transport Workers Union (TWU), the main labor union for Rail and Bus Services personnel.

The LMC reviews agenda items for compliance with safety policies, goals, and objectives. It coordinates the support and resources needed to maintain high safety standards for all aspects of service and system safety.

The LMC meets monthly to review DTPW action items referred from the DTPW Union Management Safety Committee and other items of concern for comment, direction, resolution, and execution. Minutes are maintained and disseminated to members of the committee.

IV 1.2.3 Union Management Safety Committee (UMSC)

The Union Management Safety Committee is a high-level system safety and security review and coordination committee overseeing on-going safety efforts within DTPW. According to the Committee's policy, Transit Administrative Policy (TAP) POL-SS-008, the USMC is chaired by the CSSO or his/her designee and is comprised of the CSSO and senior managers representing Metrobus Operations, Metrobus Maintenance, Metrorail Operations, Metrorail Maintenance, Metromover Maintenance, Track Maintenance, Rail Vehicle Maintenance, and Labor Relations. These representatives will be designated by the chief of each division and shall be non-termed representatives. Seven representatives, appointed by TWU, Local291, shall also serve on the committee. The Bipartisan Infrastructure Law requires the Safety Committee to approve the DTPW PTASP and any updates to the PTASP. This approval must occur before the Miami-Dade County Board of County Commissioners approves the PTASP or update. The committee oversees or takes the following actions:

a. Identifies and recommends risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the agency's safety risk assessment
b. Identifies mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended
c. Identifies safety deficiencies for purposes of continuous improvement, including but not limited to issues involving: worker assaults, safety good-faith challenges, fatigue, pedestrian safety, infectious disease, data collection & electric buses.
d. Forwards unresolved safety and security issues and required certifications (to LMC).
e. Approves CAPs for safety and security agenda items
f. Decides disposition of unresolved hazards for bus and rail systems
g. Ensures coordination of safety efforts between bus and rail systems
h. Ensures resolution of regulatory violations and non-compliance issues, as needed. (FTA, FDOT SSO, NTSB, OSHA, TSA, DHS)

IV 1.2.4 Management of Change (MOC) Boards

Configuration management within DTPW consists of the capital configuration management process during design and construction, and of the management of change (MOC) process during operations. The MOC process is more extensively examined in section III 4 of this PTASP. This process is controlled by the Bus and Rail Change Review Boards. As part of this process, the CSSO is amember of the Boards and leads same to resolve and implement CAPs to improve the system or correct an identified hazard.

IV 1.2.5 Bus Safety Management Committee (BSMC)

The BSMC coordinates on-going safety efforts within the operations and maintenance divisions of the bus system. The BSMC committee is chaired by the Assistant Director, Bus Services or his/her designee, and consists of Division Chiefs and Superintendents from all 3 Metrobus Divisions including bus maintenance. They meet monthly to update and mitigate hazards in their facilities and on their System. The CSSO is also a member of the committee. Committee members are granted an opportunity to speak and to present safety issues to the BSMC through an open communication process. Minutes will be maintained and distributed to the members of the BSMC and willbe available to others.

The BSMC will maintain a log listing of issues, corrective actions, and close-out dates. The log will include the date entered and the responsible party to correct the action. Most safety issues will be resolved within the parameters of the BSMC. Issues not resolved in the BSMC, or safety critical hazards, will be handled via the DTPW hazard management process.

BSMC actions will include the following:

a. Reviewing facility and operations system safety issues identified by members, staff, audits, or inspections
b. Maintaining hazard log for all facility and operational hazards
c. Coordinating safety efforts for administrative employees to mitigate hazards affecting administrative staff
d. Assigning responsibility for correcting hazards
e. Reviewing open items for completion
f. Ensuring safety and regulatory rule compliance (FTA, OSHA)
g. Regularly conducting inspections of facilities and operations to verify corrective actions, and to review safety in the system
h. Reporting hazard log status and system safety review results to the SSRC

IV 1.2.6 Rail Safety Management Committee (RSMC)

The Rail Safety Management Committee (RSMC) and coordinates on-going safety efforts within the operations and maintenance divisions of the rail system. The RSMC committee is chaired by the Assistant Director, Rail Services or his/her designee, and consists of General Superintendents and Chief Supervisors from all Rail Services Divisions. They meet monthly to update and mitigate hazards in their facilities and on their systems and coordinates safety efforts for administrative employees to mitigate hazards affecting administrative staff. The committee is formed for Metrorail and for Metromover systems. The CSSO is also a member of the committee.

Committee members are granted an opportunity to speak, and to present safety issues to the RSMC committee through an open communication process. Minutes will be maintained and distributed to the members of the RSMC and will be available to others.

The RSMC will maintain a log listing of issues, corrective actions, and close-out dates. The log will include the date entered and the responsible party to correct the action. Most safety issues will be resolved within the parameters of the RSMC. Issues not resolved in the RSMC, or safety critical hazards, will be handled via the DTPW hazard management process.

RSMC actions are similar to those listed under the BSMC above. Additionally, the RSMC examines compliance with FTA 49 CFR 673.

IV 1.2.7 Fire Life Safety and Security Committee (FLSTC)

The Fire Life Safety Technical Committee (FLSTC) was formed to identify and resolve fire/life safety issues that affect the DTPW system, including the development of Fire Life Safety Criteria. The FLSTC covers a broad range of areas including: security, emergency response, electrical, and criteria. The CSSO, or his/her designee, chairs the FLSTC, which is composed of representatives from DTPW, local fire and police divisions, building officials, and other public safety organizations. The FLSTC coordinates inspections and drills to verify the fire life safety and security emergency response and familiarization and compliance in the system. Drills are initiated during the activation phase, and continue during revenue operations, per federal requirement, to maintain an effective inter-agency rapport.

IV 1.2.8 Safety and Security Certification Review Committee (SSCRC)

The SSCRC is a working committee of managers that meets regularly, combining safety and security verification process functions into DTPW's construction, systems integration, and testing phases of new projects that require a formal safety certification. The SSCRC is made up of the project manager and one manager from each of the following four supporting disciplines: Safety, (Capital) Civil, Systems and Operations.

DTPW has instituted the use of the SSCRC to bring on Metrorail and Metromover projects. The membership of the committee may change slightly to best fit the role of the project manager. The remainder of this section describes the SSCRC process.

Each discipline manager will be responsible for ensuring all certified items lists (CILs), procedures, tests, filingof documents, and any other assigned activities for his/her group are completed in accordance with applicable parts of the Safety and Security Certification Plan (SSCP). The Chairperson of the SSCRC will ensure that the project follows the safety and security certification process,that all documents are properly completed and filed correctly, and that all necessary safety and security certifications are properly completed and signed before the project enters revenue service.

The SSCRC will meet regularly to develop and finalize details of the SSCP specific to the project, and then manage certification activities against the plan. They will also discuss progress, issues, and concerns in regard to certification activities and requirements. Meeting minutes will be recorded and filed each time the committee meets. An action items list will be included with the minutes, and will be updated and discussed each time the committee meets to ensure responsibility and completion of items deemed critical to successful certification. The committee will create, maintain, and adhere to a certification-specific schedule, which will help to ensure completion of certification and start-up activities prior to scheduled revenue service dates.

IV 1.2.9 Bus/Rail Incident Review Committee (IRC)

At the request of the Assistant Director of Bus Services or Rail Services, appropriately, incidents involving damage and/or injury are reviewed by the Incident Review Committee to determine cause and prevent re-occurrence. The IRC is coordinated through the Rail or Bus Services Division, and consists of Divisional managers, including the CSSO and bargaining unit employees. Members of the IRC committee review each accident individually and generate CAPs as necessary.

IV 1.3 Department Position Responsibilities

All employees have the right and responsibility to address safety in their work area, and on the system, and to present safety concerns to their immediate supervisor, manager, or OSS without fear of punitive actions. The Manager coordinates with safety committees and OSS to ensure that hazards are quickly and effectively mitigated. Specific divisions and positions within DTPW have inherent safety responsibilities. Those divsions and positions are addressed in the following matrix and sections.

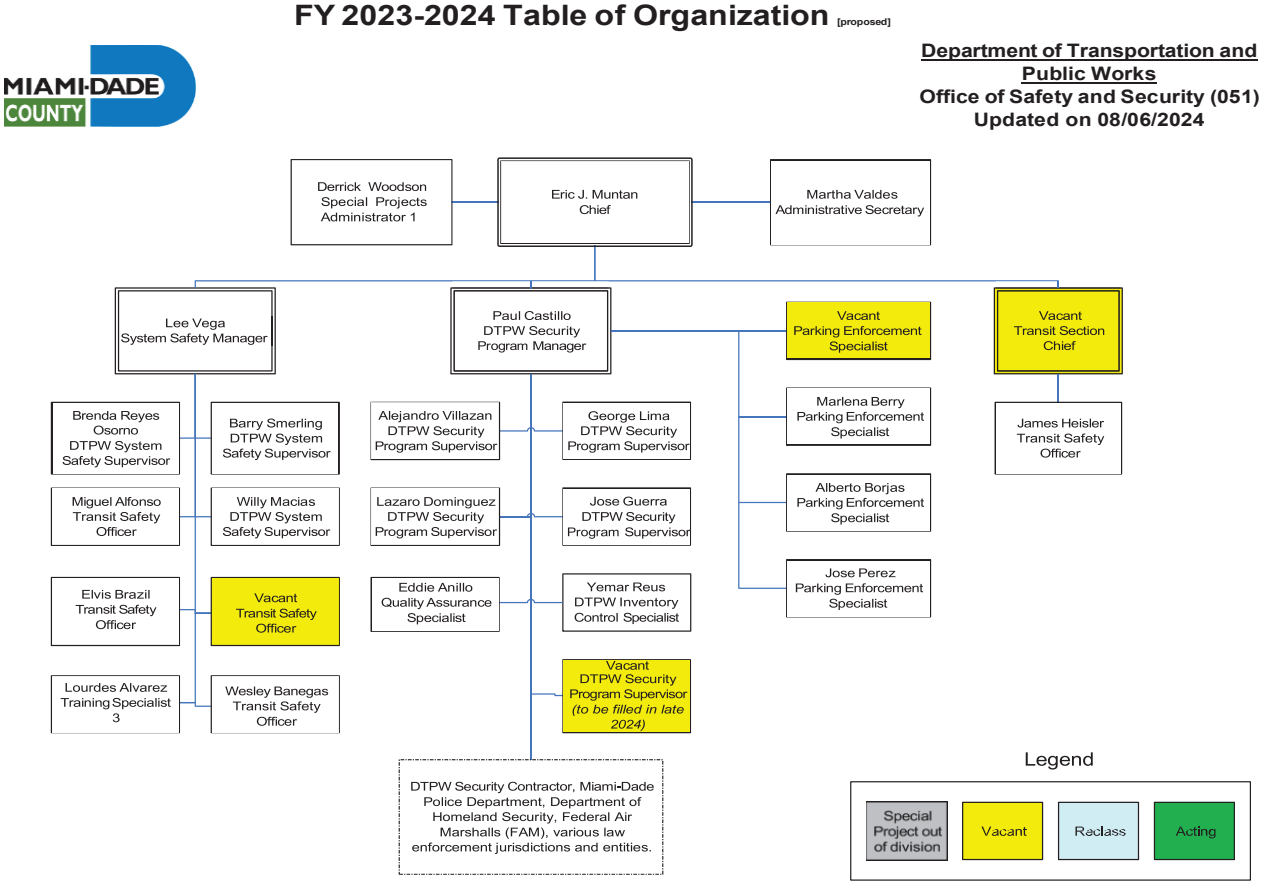
System Safety and Related Tasks Matrix

P- Primary Responsibility S-Support Responsibility
RC- Review & Comment A-Approval

Safety Tasks	Syst	Rail SVCS	Bus SVCS	Admin
Prepare safety policy statements	P	S	S	S
Approve DTPW corporate policy statements	S	S	S	S
Update PTASP	P	RC,	RC,	RC,S
Hazard management process	P	S	S	S
System modification	P	S	S	S
Safety certification	P	S	S	S
Safety data collection and analysis	P	S	S	S
Accident/incident investigations	P	P	P	P
Emergency management	P	P	S	S
Internal safety audits and reviews	P	S	S	S
Rules compliance	P	P	P	P
Facilities/ equipment inspections	S	S	P	P
Maintenance audits/inspections	S	S	P	P
Training/ certification program- employees & contractors	S	P	P	P
Configuration management/control	P	S	S	S
Local, state, federal requirements	P	P	P	P
Hazardous material programs	P	S	P	P
Drug and alcohol program	P	P	P	P
Procurement	S	P	P	P
Roadway worker program	P	S	P	P
FTA/FDOT rules, regulations, safety initiatives, programs	P	P	P	P

IV 1.3.1 Safety

The responsibility and authority for the preparation and implementation of this PTASP is vested in the DTPW Director, who has delegated this authority and responsibility to the DTPW OSS. This authority and responsibility is specifically addressed in the DTPW Director's Policy Statement and is the basis for the conduct of the tasks assigned to the DTPW OSS. The organization of the DTPW OSS is below.



DTPW OSS authorities and responsibilities include:

- Ordering cessation of unsafe activities or operations, which are evaluated as presenting an immediate and serious hazard.
- Conducting unannounced inspections and audits to identify and eliminate unsafe practices, operations or conditions not corrected by immediate management/supervision.
- Enforcing the provisions and tasks of the PTASP and applicable safety-related rules, regulations and code.

DTPW OSS activities include:

- Hazard identification, analysis and resolution

- Develop a method for review of designs, configuration modifications, operations, maintenance and emergency rules and procedures, DTPW guidelines, hazard modes including equipment, facilities and man-machine interface, and any changes to documentation impacting safety: submission of results, resolutions, with recommendations to DTPW divisions, the DTPW Director, and others, as required.
- Assure that training is conducted for all personnel. Review all training plans and documentation for the inclusion of safety and elimination of items that would negatively impact safety.
- Perform periodic and planned reviews and audits of all training and maintenance procedures, documentation and operations to verify consistency with approved plans, rules and procedures.
- Conduct periodic inspections of all locations, identify and report problem areas, issue recommendations, brief appropriate managers, and follow up on all inspection recommendations for compliance.
- Investigate all major accidents and "act-of-God" catastrophes as well as randomly selected accidents and/or repetitive accidents/incidents by location, type, or other common element.
- Review, advise and recommend procedural and rule changes, modifications, revisions, interpretations or implementation.
- Identify tasks for other DTPW divisions, which could result in eliminating, controlling or reducing hazards.
- Development of criteria and standards, and identify requirements for development of rules/procedures as they impact safety.
- Coordinate with the County Internal Services Department regarding workmen's compensation interests in relation to system safety interests.
- Identify and enforce all regulations and aspects of industrial safety governing the occupational safety and health of DTPW employees.
- Enforce all codes and regulations governing construction practices that could impact the safety of DTPW employees, passengers or property.
- Safety reporting to DTPW and local, state and federal agencies as required or appropriate.
- Develop corrective actions in response to formal requirements or recommendations from any organization with the appropriate authority.

IV 1.3.1.1 Chief Safety and Security Officer (CSSO), DTPW OSS

The CSSO reports directly to the DTPW Director and manages DTPW OSS staff. The CSSO acts at the discretion of the DTPW Director and is the primary contact with state and federal regulatory agencies.

The CSSO is responsible for evaluating and recommending security policies, appropriate for DTPW, to the DTPW Director. Security responsibilities are detailed in the DTPW System Security Emergency Preparedness Plan. Where safety is freedom from accidental danger, security is defined as freedom from intentional danger. The System Security and PTASP plans are intended to complement one another, just as safety and security does in practice.

The CSSO, DTPW OSS is responsible for leading the DTPW OSS in the following activities:

- Perform safety planning activities including system safety, construction safety and safety certification
- Oversee the performance of safety audits
- Maintain liaison with public safety agencies and oversight agencies for emergency response planning, emergency procedures and disaster drills
- Ensure compliance with federal, state, and local laws and regulations
- Conduct appropriate investigations and developing reports
- Review and approve training programs to reduce/eliminate preventable accidents and expand awareness of safety procedures
- Implement the safety certification program
- Implement the PTASP, the Hurricane Manual, Business Continuity of Operations Plan, System Security Emergency Preparedness Plan, and Radiological Response Plan
- Analyze, monitor and update policies, procedures and plans to promote a safe working environment
- Review and approve engineering designs, for safety criteria, prior to construction of new facilities or systems, or modifications to the existing rail/bus system
- Review and approve safety education programs
- Integrate system safety and security considerations into bus and rail operations, new design, and construction
- Develop and implement rail and bus safety and security programs to include accident/fire prevention and investigation, hazard identification and resolution, and emergency preparedness
- Convene ad-hoc safety committees as appropriate
- Provide leadership to the safety staff

IV 1.3.1.2 System Safety Manager

The System Safety Manager supervises Transit Safety Supervisor(s) and Officers. Job responsibilities include:

- Develop, implement and recommend safety programs to the CSSO to maximize safe and healthy working conditions for employees and maximize public and passenger safety
- Remain vigilant for novel approaches to promote safety
- Provide leadership to the safety supervisors and the safety officers
- Ensure compliance to all applicable Local, State and Federal regulations
- Review and approve training programs, including preparation of necessary reports
- Review all OSS SOP’s, Manuals and Programs, on an annual basis
- Review engineering designs prior to construction of new facilities or systems, or modifications to the existing rail/bus system
- Assist with implementation of the safety certification program
- Provide regular safety reports to the CSSO concerning accidents, incidents, and occupational health and safety issues

- Support safety audits
- Research and investigate other industry practices
- Assist in preparing communications of safety for publications
- Assist with implementation and updates of the PTASP

IV 1.3.1.3 System Safety Supervisors

The System Safety Supervisors report to the System Safety Manager and is responsible for the following:

- Conducts and supervises complex safety engineering studies
- Performs and supervises the conduct of independent audits and inspections
- Independently conducts and monitors subordinate staff in the performance of major accident investigations
- Oversees and delegates management information reporting system tasks in support of hazard analysis, statistical analysis and trend analysis
- Other duties as assigned including support of all Transit Safety Officer duties identified below
- Participates in Fire/Life Safety Committee, as needed

IV 1.3.1.4 Transit Safety Officer

The Transit Safety Officers report to the System Safety Manager and are responsible for the following:

- Identify, prioritize and resolve safety hazards
- Investigate accidents as appropriate
- Prepare required regulatory reports
- Perform safety analyses, as required
- Perform design review of rail/bus systems and facilities, as required
- Perform safety audits and inspections of facilities to ensure compliance with local, state and federal codes and regulations
- Assist in safety certification including design, construction, integrated tests, emergency drills and training, as assigned by the OSS management
- Conduct and support FTA-mandated safety audits
- Participate in Union-Management Safety Committee meetings, as needed
- Assist in monitoring all work injuries (First Report of Injury, etc.), as needed
- Assist in the development and monitoring of safety goals in the rail division, as needed
- Assist with periodic safety related drills, in the rail/bus division, as needed
- Participates in Fire/Life Safety Committee, as needed
- Assist with employee safety awareness campaigns (i.e. posters)
- Collect and document all work injuries (First Report of Injury, etc.)
- Assist with safety awards programs, as needed

IV 1.3.1.5 Training Specialist 3 (Safety)

- Train/Coordinate/Track required OSHA classes for DTPW employees.

- Assist DTPW Operations and Maintenance Divisions in development of training packages to comply with associated FDOT CAPs.
- Work with DTPW Operations and Maintenance divisions to identify the needs and weaknesses of employees and develop training sessions, to minimize accidents due to improper practices.

IV 1.3.1.6 Transit Section Chief, Audit and Compliance Section

The Section Chief reports directly to the CSSO and is responsible for the following activities:

- Develops and conducts DTPW internal audits; develop audit reports and recommendations; track/update CAPs generated from these audits; within all divisions and cover agency internal safety audit policies and procedures.
- Tracks and updates CAPs generated from external audits performed by Federal, State & Local auditing agencies. These reviews/activities may be conducted as determined by those organizations having jurisdiction, oversight or as requested by the DTPW Director.
- Tracks and updates CAPs generated from NTSB, FTA and FDOT reportable accident/incident/unacceptable hazard investigations. Prepares and submits monthly status CAP reports to the FDOT and/or other agencies having jurisdiction (as noted above), until all the CAPs for the particular investigation have been closed.

IV 1.3.2 DTPW Safety and Security Interfaces

IV 1.3.2.1 Director, DTPW

The DTPW Director is responsible for ensuring DTPW's commitment to safety. This responsibility includes:

- Promulgating the safety policy for DTPW
- Delegating to the CSSO, the responsibility for the safety of DTPW and ensuring that DTPW's Rail and Bus System Safety programs are well managed and coordinated throughout the agency
- Accountable for ensuring action is taken, as necessary, to address substandard performance of the SMS
- Incorporating safety awareness into all management decision-making activities
- Approving and supporting the financial resources needed to ensure the safety of DTPW customers
- Maintaining, in DTPW, an awareness of the need for safety to DTPW customers, employees and partners
- Continuously reviewing, monitoring, and addressing safety issues
- Funding training and education for DTPW employees needed to ensure safety for customers and employees
- Fostering interagency and intergovernmental cooperation and agreements needed to ensure that safety issues are well coordinated
- Ensuring continuous communication about safety related matters with

customers, employees, Union leadership, and neighborhood associations.

IV 1.3.2.2 Rail Services

Rail Services consists of Metrorail/Metromover vehicle maintenance, track maintenance and transportation. The Rail Services safety activities include:

- In cooperation with the DTPW OSS, establishing safety goals and objectives for the department
- Assisting and ensuring that training programs provide training to rail transportation and maintenance personnel in how to operate and maintain the Metrorail system
- Reporting and investigating to determine causes and eliminate hazards
- Providing design refinements and vehicle maintenance on all equipment necessary to maximize passenger and employee safety
- Providing design refinements and right of way maintenance on all equipment necessary to maximize passenger and employee safety
- Issuing safety equipment and ensuring its proper use
- Training personnel in rail (includes Metromover)operations safety
- Conducting and participating in emergency drills and table top exercises
- Correcting unsafe conditions and practices
- Providing operations liaison for the design and construction of new systems, facilities and equipment
- Managing implementation of new rail lines or modifications to existing rail lines
- Supporting the safety certification program
- Review of all DTPW OSS matrices, findings, etc.
- Developing, maintaining and updating operating rules and procedures, including dissemination to all employees, as appropriate
- Supporting internal audits.

IV 1.3.2.3 Bus Services Division

The Bus Services Division consists of vehicle maintenance and transportation. The Bus Services Division safety activities include:

- In cooperation with the DTPW OSS, establishing safety goals and objectives for the department
- Assisting and ensuring that training programs provide training to bus transportation and maintenance personnel in how to operate and maintain the Metrobus systemReporting and investigating to determine causes and eliminate hazards
- Providing design refinements and vehicle maintenance on all equipment necessary to maximize passenger and employee safety
- Providing design refinements and right of way maintenance on all equipment necessary to maximize passenger and employee safety
- Issuing safety equipment and ensuring its proper use Training personnel in bus operations safety
- Conducting and participating in emergency drills and table top exercises
- Correcting unsafe conditions and practices

- Providing operations liaison for the design and construction of new systems, facilities and equipment
- Managing the implementation of new bus lines or modifications to existing bus lines
- Supporting the safety certification program
- Developing, maintaining and updating operating rules and procedures, including dissemination to all employees, as appropriate
- Supporting internal audits.

IV 1.3.2.4 Administrative Divisions

The DTPW Divisions performing administrative functions that support DTPW safety responsibilities include Financial Services, Human Resources, Customer Services, Marketing, Media Relations, Support Services, Materials Management, Strategic Planning and Performance Analysis and Grants and Reimbursement. The Service Planning and Scheduling Section will prepare schedules for Metrorail operations and for bus/rail interface. As per the DTPW Business Plan, to maintain management strength and the division's ability to continue to provide support to the department's goals, DTPW's Recruitment Unit meets with division heads on a quarterly basis throughout the Department to review current vacancies, classifications, budgeting, and position reviews for succession planning. The resultant employee staffing plans are kept by the DTPW Human Resources Division. Divisions, performing administrative functions, support of DTPW Safety responsibilities include:

- Administering the Drug and Alcohol Program
- Administering pre-employment physicals and the Medical Monitoring Program
- Providing new employee orientation and training
- Obtaining funding for safety programs
- Obtaining legislation to implement safety regulation, such as State Safety Oversight
- Implementing public rail/bus safety education programs and promotional activities.
- Scheduling maintenance-related preventive maintenance tests/inspections and maintaining change control procedures/documentation.

Marketing, Customer Service and Media Relations responsibilities include:

- Organize, attend, and/or participate in special events and promotions advocating DTPW Safety and Security initiatives.
- Develop marketing outreach, campaign and strategies that advertise DTPW Safety and Security programs. This can be done through a combination of personal contacts, brochures, mass mailings, public presentations, special events, the Internet, etc.
- Perform and supervise all communication, outreach, marketing, public relations, and media duties relating to DTPW Safety/Security-related accidents and incidents.

IV 1.3.2.5 Project Delivery & Transportation Planning & Policy Divisions

The Project Delivery & Transportation Planning & Policy Divisions will support Metrorail/Metrobus

operations through the Planning, Engineering and Construction Sections. Engineering and Construction will provide design and construction support for modifications to Metrorail/Metrobus facilities, or for new Metrorail/Metrobus facilities, as required. Engineering and Construction will develop the configuration management system for all capital projects to support the Metrorail system. Project configuration management requirements are specified in the DTPW Configuration Management Control for Transit Capital Projects SOP (PR-EN-005).

IV 1.3.2.6 Quality Assurance Division

DTPW QAD is responsible for providing Quality Assurance (QA) support and oversight to DTPW's preventive maintenance inspections and transit projects in accordance with federal, state, and local requirements.

The QA oversight function consists of providing direction for the development and implementation of DTPW's internal Quality Management System program to include:

- QA/QC training;
- Establishing QA requirements on contract documents;
- Reviewing and approving design and construction contractors QA Plans;
- Developing and maintaining the DTPW QA Manual, QA Procedures and the DTPW Quality Assurance Program Plans;
- Performing random Quality Control (QC) Inspections of transit facilities (i.e., Metrorail/ Metromover Stations & Park and Rides) from a customer's perspective;
- Assisting in the review of the internal performance data and overall process improvement initiatives.
- Coordinate the annual reviews of the DTPW internal policies and procedures.

IV 2 Training and Certification Program

IV 2.1 Employee and Contractor Safety

Training and certification is a very important element of SMS, and as such, DTPW has developed a number of training programs. The following employee classifications perform work that requires safety training and/or certification:

a. Train/Bus Operators
b. Metrorail/Metrobus/Metromover Vehicle Maintenance
c. Track and Guideway
d. Facilities Maintenance
e. Rail/Bus Traffic Controllers
f. Other personnel and contractors that access or work adjacent to DTPW's transit system

IV 2.1.1 Rail Services

The Rail Services staff engaged in training and development functions are responsible for

continuous training, evaluation, and support of DTPW's five (5) Rail Services divisions; which includes the regular assessment of the training needs of technicians,supervisors, and other Rail Services classifications responsible for operation and maintenance of the Metrorail and Metromover vehicle fleet and passenger service consisting of 136 Metrorail cars and 29 Metromover cars. The Training Specialist 3 for Rail Services is the Training Lead responsible for coordinating and documenting training in Rail Services and for ensuring the appropriate training of contractors and emergency response personnel is accomplished in a timely manner and that objective evidence of training completion is maintained.

Training and certification programs occur during system start-up and operations. The course content, curriculum, testing, and outlines of safety related training must be reviewed and accepted by the DTPW OSS as outlined in the PTASP, the DTPW Training Program Plan (TPP), the Training Coordination Policy TAP, and the Training Package Guidelines SOP. Documentation of program(s) plans, course content, lesson plans, trainer qualifications, training participants, and training schedules must be maintained. Activities or functions judged to be safety critical may require special training and/or certification.

The responsibility for ensuring adequate training lies under the leadership provided by Rail Services Division Management. Classroom training delivery is conducted by Rail Services DTPW Operations & Maintenance Instructors who facilitate initial, re-qualification, and refresher training. Rail Supervisors and/or On-the-Job Training (OJT) Facilitators designated by Rail Services Management, are responsible for the coordination and delivery of required field and on-the-job training.

Safety training will be an ongoing activity conducted/coordinated on a periodic or as needed basis, by the DTPW OSS Training Specialist. All documentation of training and certification of personnel are subject to audit by the DTPW OSS and shall be included in the internal audit program. Activities or functions judged to be safety critical may require special training and/or certification.

IV 2.1.2 Bus Services

The DTPW Bus Services Training Section is responsible for the development and implementation of training programs and for ensuring that the appropriate training of all DTPW personnel, contractors and emergency response personnel is accomplished in a timely manner and that objective evidence of given training is maintained. Training course content, curriculum, testing and outlines of safety related training must be reviewed and accepted by the DTPW OSS. Documentation of program(s) plans, course content, lesson plans, personnel trained, trainer qualifications, and training schedule must be maintained. Safety training will be an ongoing activity conducted on a periodic or as needed basis. All documentation of training and certification of personnel are subject to audit by the DTPW OSS and shall be included in the internal audit program. Activities or functions judged to be safety critical may require special training and/or certification.

IV 2.2 Training and Certification for Employees and Contractors

DTPW personnel, as identified, shall be provided sufficient initial and refresher

training for performing necessary and critical safety functions and activities. Rail/Bus Services shall establish a Rail or Bus Services Training Program that includes the following elements:

- ✓ DTPW classifications of safety-related work requiring training and certification;
- ✓ A description of the training and certification program for DTPW personnel in safety-related positions;
- ✓ A process used to maintain and access employee and contractor training records;
- ✓ A process used to assess compliance with training and certification requirements

System Safety methods and procedures must be defined and be made an integral part of the daily activities of transit system personnel, appropriate to the activity and related hazards. The criteria for training activities are as follows:

1. Identify requirements for all DTPW training as it impacts safety. This encompasses initial and refresher training related to procedures and equipment, including manufacturers' training and re-training requirements identified as a result of accident investigations.
2. Review all training programs for safety adequacy.
3. Assess the effectiveness of the training courses and on-the-job experience by the conduct of emergency scenarios, drills, audits and evaluations. Evaluations may be by on-the-job performance, statistical trends, public perception, etc.
4. Specific training with specialized curriculum will be provided to control operators, mechanics and emergency response personnel when major operational changes are made or with the introduction of new or specialty vehicles.
5. Established employee medical standards that meet the following objectives:

    - Employees selected are physically fit, and can be expected to remain so.
    - Individuals selected for positions, particularly Train/Bus Operators and Rail/Bus Traffic Controllers, meet or exceed medical standards set forth by DTPW or the Department of Transportation.

Training and certification programs occur during system start-up and operations. In addition, the Transit Services Divisions ensure that the necessary outside agencies, such as the fire services, police divisions, emergency medical services, medical examiner, etc. have available training on the Metrorail system as outlined in the Metrorail, Metromover, Metrobus Operation Rules and Procedures Manuals, kept in the specific Rail/Bus Services Division Office files.

DTPW employees and contractor personnel, whether construction or service contractors, are required to be in compliance with applicable DTPW rules and standard operating procedures (SOP) as well as local, state, and federal safety regulations. Service contractors who perform specific jobs under contract are required to be in compliance with specific safety or environmental laws that are or may be affected by their work.

DTPW has developed a *Construction Safety Manual* that governs contractor safety specifically for contracted construction workers for DTPW. This manual outlines procedures and responsibilities of DTPW project managers and contractor personnel who contract with DTPW to perform construction work activities.

The DTPW safety goal is to achieve accident-free construction projects.

The DTPW *Construction Safety Manual* reflects minimal standards. All general contractors, contractors, and their sub-tiers will be expected to meet or exceed the standards and good safe practices outlined in the manual and their own safety program, whichever is more stringent.

The DTPW Program Management, Contract Services and Cost Scheduling Division will review and implement into contract language requirements for the contract employees to meet. These contracts are written and reviewed by the County Attorney's Office personnel, as well as the contract administrator, to assure that specific safety and environmental requirements for contract employees are met.

IV 2.3 Work-Required Training for Employees and Contractors

Rail/Bus training and certification programs (Rail/Bus Training Program Plans) for employees include the following:

- Train/Bus operators: rules and procedures, vehicle certification, and line familiarization
- Supervisors: rules and procedures, vehicle certification, line familiarization, specialized training such as incident/accident investigation
- Metrorail/Metrobus/Metromover vehicle maintainers: rules and procedures, line familiarization; in-depth vehicle certification; on-the-job training
- Systems maintainers: rules and procedures, vehicle certification; specialized training

All train/bus operators and rail/bus traffic controllers receive annual refresher training. Criteria for the refresher training can be found in the DTPW Rail/Bus Training Office. Each area of primary responsibility may establish outside certification with known transit training programs or internally through objective evidence of materials provided and passing minimal testing requirements for each subject matter.

Training is provided regarding the DTPW Roadway Worker Protection (RWP) Plan. The RWP Plan applies to all DTPW personnel conducting work activities on-track or near the Metrorail right-of-way, to include the Lehman Center Metrorail Operations & Maintenance Facility Yard tracks. The RWP Plan was developed per American Public Transportation Association (APTA), Roadway Protection Program, Standard for Work Zone Safety, Standard for Contractor Responsibility for Right-of-Way Safety, DTPW rules, procedures and best practices and Federal Transit Administration (FTA) Safety Advisory 14-1. The RWP Plan establishes a Zone of Protection for working limits whenever personnel are required to enter or conduct any on-track activity. Train movement affecting the Zone of Protection shall be controlled by Exclusive Track Occupancy or Foul Time protocols.The course is offered as a one part course totaling four hours of classroom instruction. This training is intended for all DTPW Personnel conducting work on or near the Metrorail Right of Way.

Specialized courses, such as those specific to System Safety, automated guideway transit, industrial operations, hazardous materials, security, emergency preparedness and response, should be available for personnel experienced in System Safety practice.

Any contractor requesting a permit to work on or near the Right of Way must complete the DTPW Rail Safety Awareness class offered by designated Rail Services instructors. A roster is maintained by the designated Rail Services instuctor of all employees completing this training and a certification card is issued by the trainer. Contractors are responsible to train their employees on OSHA-required training prior to performing DTPW projects.

All new DTPW maintenance employees receive Right-to-Know training in new employee orientation/initial training. All new maintenance employees and all current employees who wear a respirator receive training in respirator protection. Respirator users receive fit-tests, as required, that are performed by the appropriate DTPW medical provider.

All new employees, in specific maintenance classifications, receive training in bloodborne pathogens awareness that is coordinated by the Training Specialist reporting to the DTPW OSS. Train operators, transportation supervisors and supervisors of specific maintenance classifications also receive bloodborne pathogens awareness training. Refresher bloodborne pathogens training is provided as requested, by management, the DTPW OSS, or as the result of an infraction of procedures.

Additional training provided, dependent upon regulations and tasks, includes:

- Forklift
- Lock-Out/Tag-Out
- Confined Space
- Personal Protective Equipment (PPE)
- Other topics as requested

Documentation of training shall be maintained in the employee file, in the appropriate training division file, which is the responsibility of the individual's manager/supervisor. Additionally, the division shall use a tracking computer program to document all training given and provide reports to track refresher and required training timetables.

Employees and contractors, who are under a legal contract with DTPW, are obligated to comply with specific safety and environmental requirements and demonstrate quality of workmanship by observation and records reviews. DTPW supervisors, managers, and safety administrators are authorized to make regular observations of work being performed and will determine whether or not safety and environmental requirements are being complied with. The quality of materials and construction processes will also be reviewed by designated quality assurance personnel.

IV 2.4 Employee and Contractor Safety Programs

DTPW has a multifaceted employee safety program. This program is developed by OSS in conjunction with the various DTPW divisions affected by the program. By this program, DTPW, its management, staff, and employees are required to follow all

applicable local, state, and federal regulations addressing safety. These regulations include the employee right to know provisions. The program also addresses standard industry practice for safety requirements. The DTPW OSS performs internal safety audits on a 3-year cycle, and one of the areas reviewed for safety compliance is training and certification for employees and contractors. The internal audit process includes a means of determining that all necessary training is being conducted and documented to include proper qualification, identification and categories of operating and maintenance personnel. Training material, testing and grading processes shall be reviewed and evaluated for completeness and accuracy.

IV 2.5 Construction Safety Requirements

The construction safety program is developed and managed by DTPW OSS. This program defines construction safety functions and responsibilities and other construction safety requirements such as safety equipment, documentation, and safety personnel. All contractors and DTPW employees must comply with Occupation Safety and Health Administration (OSHA) rules and the requirements of the construction safety program, DTPW Rail/Bus rule books, SOPs, and individual company contract agreements with DTPW.

Contractors who have personnel working around rail systems shall comply with DTPW RWP and DTPW Adjacent Construction Safety Manual requirements. Responsive to that requirement, DTPW has established a training and certification class for rail roadway workers. All constructors and DTPW employees who may work on or near the tracks are required to attend this training annually and obtain a certification card to keep on their person.

The DTPW construction safety program will be reviewed on an annual basis and revised as needed. OSS will have primary responsibility for this update. OSS will participate (as needed) in the Federal Transit Administration (FTA Triennial Audits 49 CFR 673), as they are conducted each three-year cycle.

2.6 Training and Certification Training, Courses, Education

Rail/Bus Training Divisions maintain electronic training records for the following items: RWP, blood borne pathogens, hazardous communications, train/bus operator initial training, Train operator refresher, rail/bus traffic controller initial training, rail/bus traffic controller refresher, train/bus equipment certifications, lockout tag out, blue flag protection and forklift certification. All safety related courses that are conducted in a classroom environment or through computer based delivery are also maintained electronically by the Rail/Bus Training Divisions. The training supervisor/managers review the training records to determine completion.

IV 2.6.1 Safety Staff Certification

In order to implement this PTASP, DTPW OSS Management Staff personnel must be familiar with System Safety. Entry level personnel must receive training as soon as required in the Moving Ahead for Progress in the 21st Century Act (MAP–21) legislation, applicable to transit agency personnel responsible for safety oversight. Consequently, the following Transit Safety Institute (TSI) courses are required for

DTPW OSS personnel:

1. Transit Rail System Safety
2. Transit Bus System Safety
3. Transit Rail Incident Investigation
4. Fundamentals of Bus Collision Investigation
5. Transit System Security
6. Effectively Managing Transit Emergencies

DTPW OSS staff are TSSP Certified through the Transportation Safety Institute and are eligible to receive additional safety certification through the World Safety Organization. Safety related instruction is emphasized through DTPW's corporate policies and procedures, maintained on DTPW's intranet.

IV 3 Local, State, and Federal Requirements

IV 3.1 Safety Policies

The State of Florida requires that DTPW develop and implement this PTASP for the transit system in compliance with Subsection 341.061, Florida Statutes, "Transit Safety Standards; Inspections and System Safety Reviews". The Florida Department of Transportation (FDOT) is the responsible agency for the implementation and enforcement. Section 341.061, F.S., Rule 14-15.017, Rule 14-90 and the standards 725-030-014 establish authority for the Safety and Security Oversight Program (SSO). The requirements imposed by this SSO, as amended, are also incorporated by this PTASP. Following, are other State and local laws impacting safety and incorporated in this PTASP, insofar as applicable to the transit system.

IV 3.2 Federal Regulations

- Federal DOT (Department of Transportation) Regulation, 49 CFR, Parts 27, 37 and 38 ("Americans with Disabilities Act").
- Federal EPA (Environmental Protection Agency) Regulation 40 CFR 26l Titled: Hazardous Waste (Implemented by State Department of Environmental Resources).
- Federal Pre-treatment (Sewage) Regulation 40CFR403.
- 49 CFR, Part 29, "Drug Free Workplace Act".
- "Omnibus Transportation Employee Testing Act of 1991."
- 49 CFR, Part 655, "Prevention of Alcohol and Prohibitive Drug Misuse in Transit Operations"
- 49 CFR, Part 659, "State Safety Oversight; Rail Fixed Guideway Systems"

IV 3.3 State Regulations

1. Florida Right to Know Law, Chapter 442, Florida Statutes.
2. The Florida Building Code.

IV 3.4 Permitting, Environment and Regulatory Affairs (Regulatory Economic Resources)

- Miami-Dade County Regulations under Chapter 24 of MDC

- Environmental Protection Ordinances
- Florida Statutes, Chapter 403, Environmental Control Law,Chapter 403,Florida Administrative Code Rule #l76l (Underground Tanks)
- Chapter 403, Florida Administrative Code Rule #l730 (Hazardous Waste)

IV 3.5 Occupational, Environmental, Safety and Health (OES&H)

An important aspect of safety compliance falls under Occupational, Environmental, Safety and Health (OES&H) rules, regulations, guidance, and initiatives. DTPW's OSS personnel work closely with managers, supervisors, and employees to ensure understanding of the various requirements of OES&H, as well as to other federal, state, and local rules, standards, and ordinances.

Appropriate new employees, as deemed by the DTPW Human Resources Training Unit, receive awareness training about environmental commitments, provided by the DTPW Environmental Engineer as part of their presentation in their New Employee Orientation presentation. New DTPW operations and maintenance employees are also trained by their supervisors on department environmental procedures involving SDS and hazard communication, recycling, spill response, excessidling, and energy management. DTPW OES&H policies require that DTPW be in compliance with legal requirements of all local, state, and federal laws.

Contractors performing work at DTPW facilities must furnish copies of Safety Data Sheets of chemicals to DTPW. Contractors must present their work plan and employee personal protection procedures for handling chemicals associated with the contracted work at DTPW. Contractor personnel who demonstrate a lack of understanding of applicable rules and procedures may be removed from the work site and require additional safety training be conducted.

IV 3.6 Construction Safety

Construction safety is administered in accordance with contract specifications, and applicable Federal, State and local safety requirements. The DTPW OSS has primary responsibility for safety oversight of construction projects. The program is based on, and complies with, applicable federal, state, and local safety codes and regulations, including OSHA. Procedures have been established for the control of operating hazards, including but not limited, to chemicals, noise, cut and abrasion injuries, strain, and sprain injuries. Contractors are required to comply with these requirements for the safety of their own employees as well as to safeguard DTPW employees, contractors, passengers and the public.

DTPW Construction and Project Management approves the contractor's safety program plan and supporting documentation, with the concurrence of the OSS. Particular emphasis is placed on work that may affect DTPW operations, passengers, facilities, and personnel. All contractors working in the DTPW rail rights of way, or interfacing with DTPW Rail Operations are required to attend Roadway Worker Protection (RWP) safety training. This training covers track access, right of way flagging, and operating procedures. Audits of the contractors are conducted to assure compliance with Federal and State Law, and the DTPW requirements.

IV 3.6.1 Personal Protective Equipment

Appropriate personal protective equipment (PPE) such as safety glasses, safety boots, gloves, face shields and work uniforms, etc. is provided and is required to be used in

performing various work by DTPW personnel. This equipment is evaluated and approved by OSS prior to procurement. Employees who are required to wear approved safety work boots use a tool or uniform allowance. DTPW provides personal protective equipment and supervisors approve purchases as needed by the employees.

IV 3.6.2 Safety and Industrial Hygiene Studies and Reviews.

The OSS is responsible for monitoring facility compliance with applicable OSHA standards (29 CFR 1910, General Industry and 29 CFR 1926 Construction Standards). Safety personnel work with managers and supervisors to develop programs to ensure a safe and healthful work environment. OSS performs periodic safety audits / inspections of facilities and work equipment. The OSS develops processes for safety procedures such as confined space, blood borne pathogens, hazard communication, respiratory protection, and personal protective equipment.

Industrial hygiene studies are coordinated through DTPW environmental contracted personnel to evaluate the degree of employee exposure to chemical and or physical agents encountered in the work environment. The evaluation results are utilized to determine the necessary corrective action, including implementation of engineering and administrative controls required and the use of PPE. Examples of industrial hygiene testing performed include:

- Noise level monitoring
- Organic vapors or solvents
- Measuring the particulate level of air quality

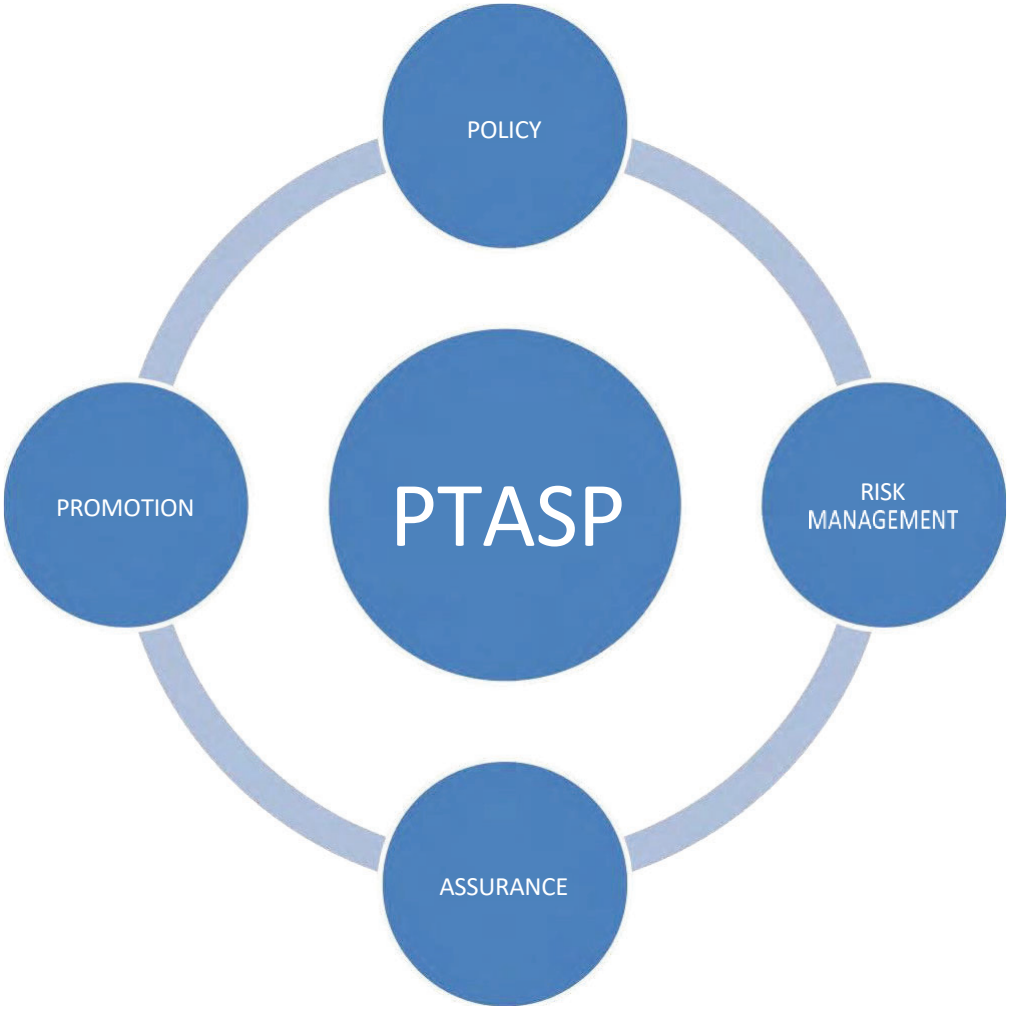
IV 3.6.3 Safety Training Effectiveness and Knowledge of Employees

DTPW provides safety training for employees in accordance with OSHA OES&H requirements. Supervisors are required to assess employee knowledge as necessary. OSS personnel perform observations of employee and supervisor knowledge of safety regulatory requirements as part of facility and work site inspections and audits and may recommend refresher training, as required.

The TransitNet web portal provides a centralized location to record and communicate Transit Agency Policies (TAPs) policies and SOPs. DTPW's management is charged with assuring development and inclusion of appropriate policies and procedures from their respective responsibility areas. DTPW management will prepare TAPs and SOPs in a manner and format that effectively communicates information. Properly staffed TAPs will be considered for approval by the DTPW Director.

The approved TAP/SOP will be released via a Notification of Release will be sent to all DTPW employees by the Document Management Division, informing them that the TAP/SOP has been posted on DTPW Employee Hub/TransitNet and includes web link to specific TAP/SOP.

Appendices



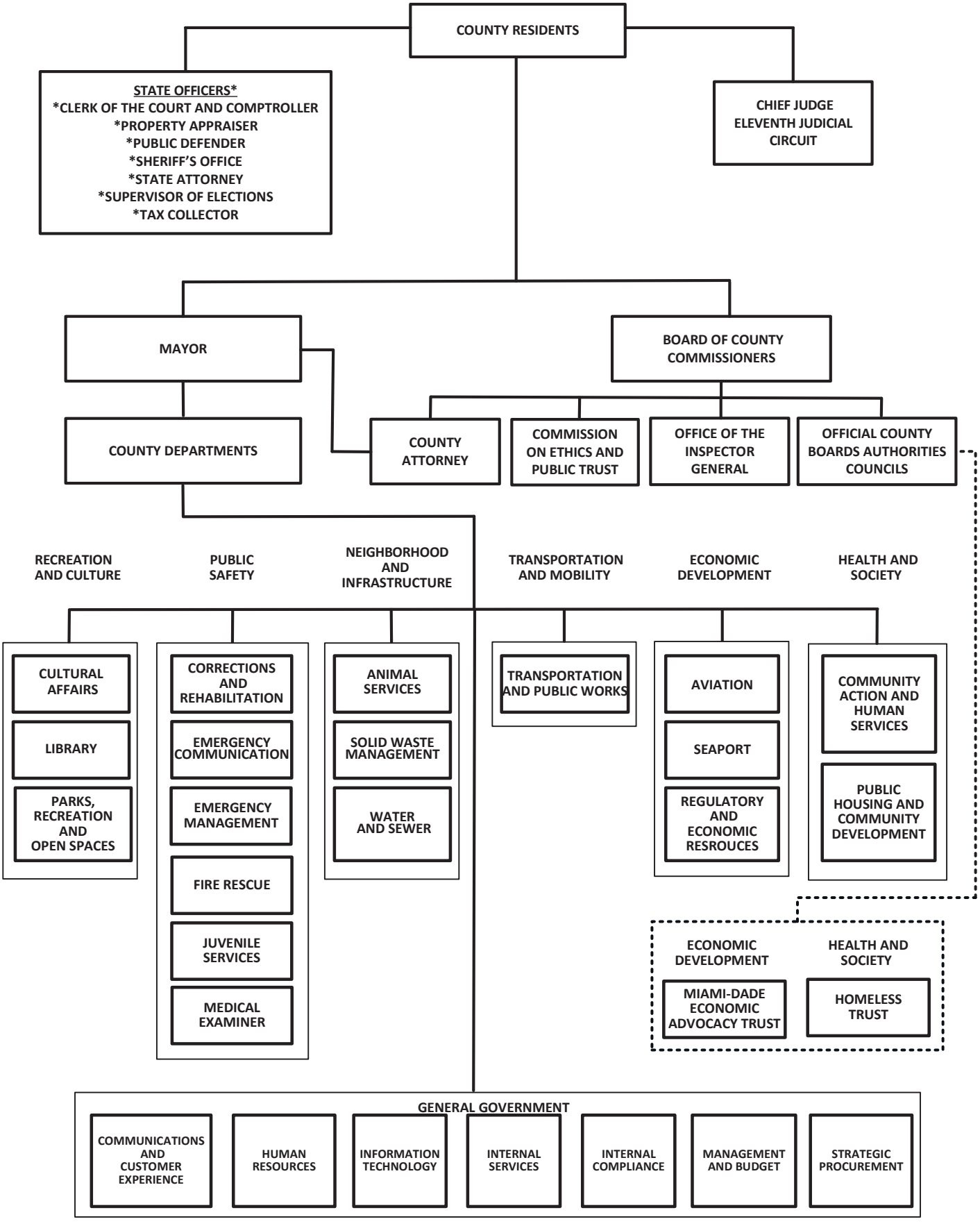
APPENDIX A

MIAMI-DADE COUNTY

TABLE OF ORGANIZATION

by STRATEGIC AREA

2024-25



APPENDIX B

Miami-Dade County
Department of Transportation and Public Works
Employee Organizational Chart

Chief Administrative Officer (Labor relations, employee development, recruiting, training, procurement (goods and services), inner/interdepartmental coordination) ***Melissa Rolle-Scott***
Chief Financial Officer (Finance, treasury, accounting, budget, fleet management) ***Melvin Cartagena***
Chief External Affairs Officer (Municipal coordination, media and public relations, marketing, social media, strategic and project communications) ***Juan Mendieta***
Chief of Intergovernmental Affairs (Government affairs, policy, and other special initiatives) ***Phillip Edwards***
Chief Strategy Officer (Strategic plan development and implementation, program/project coordination, business and systems processes and improvements, strategic partnerships, performance analytics, quality assurance) ***Beth Goldsmith***
Chief of Customer Experience & Engagement (Customer experience, public engagement, Easy Card services, intra and interagency coordination) ***Vacant***

Office of the Director and CEO
Miami-Dade Department of Transportation and Public Works
Eulois Cleckley

Chief Safety Officer
Eric Muntan

Chief Civil Rights/EEO Officer
James Rowan

County Attorney Office
Strategic Procurement Department
Information Technology Department
Supportive Departments

Transportation Planning and Policy
Chief Planning Officer
Lisa Colmenares, AICP

Infrastructure Planning
Gabriella Serrado
- Environmental Clearance/NEPA
- PD&E
- Transit Oriented Development (TOD) planning
- Transit systems planning
- Long Range Service Planning

Multimodal Development Planning
Paola Baez, PE
- Regional Corridor and Citywide planning
- Pedestrian planning
- Bicycle planning
- Freight planning
- Safe Routes to School
- Vision Zero program
- Complete streets
- TIP/LRTP

Passenger Amenities & Facilities Planning
Raonel Rodriguez
- Transit amenities planning
- Transit facilities

Grant Administration & Planning
Mia Marin
- Grants administration
- Federal & State compliance
- Tri-annual Reviews

Project Delivery
Chief Project Delivery Officer
Josiel Ferrer-Diaz, PE

Project Management Office (PMO)
Maria Perdomo, PE
- SMART Program
- Work program development and oversight
- A&E procurement
- A&E contract management
- Establish standards, policies and resources
- Capital program controls, estimating, and scheduling
- Reporting & document controls

Infrastructure Project Management
Miguel Soria, PE
- Roadway design
- Stormwater design
- Transportation Engineering and Design
- Bridge design
- Safety analysis
- Maintenance of Traffic (MOT)
- Traffic impact studies

Transit Project Management and Support Services
Javier Bustamante
- Transit projects design and engineering
- Special projects and architectural and design standards
- ROW acquisition and relocation
- Joint development program (TOD)
- Utility and railroad management
- Permitting and inspections
- Property leasing and surplus
- Leasing

Construction Management
Alex Barrios
- Construction management
- Bridge construction
- Intersection improvements
- Drainage improvements
- Resurfacing program

Capital Programs
German Arenes, PE
- SMART Program construction
- Transit Guideway improvement program
- Structural Renewal & Improvement program

Infrastructure Operations and Maintenance
Chief Operations and Maintenance Officer
Maria Kundhart

Transportation Operations
Frank Aira, PE
- Signs and markings maintenance
- Field operations
- Transportation system operations
- ATMS
- Transportation management center
- Signal Operations

Infrastructure Maintenance
Isaac Wynn*
- Road, bridge, sidewalk, and canal maintenance
- Street repair
- Causeway maintenance
- Drainage
- Pothole repair
- ADA ramp maintenance
- Neat teams
- Structural inspections (Roadway and bridges)

Facilities Maintenance
Vacant
- Facility maintenance
- Structural inspections (facilities)

Causeways Operations
Michael Bauman
- Toll collection & operations
- Rickenbacker & Venetian
- Annual toll planning

Transit Operations and Maintenance
Chief Transit Operations Officer
Sean Adgerson

Innovation & Mobility Services
Carlos Cruz Casas, PE
- Service Planning & Scheduling
- New mobility initiatives
- Special Transportation Services (STS)
- PTRD
- Transportation demand management

Transportation Operations - Bus
Joel Perez
- Bus services
- Bus operations
- Bus maintenance

Transit Operations - Rail
Scott Nicoll
- Metrorail and Metromover operations
- Metrorail/ Metromover maintenance
- Track and Guideway maintenance (Rail)

Transit Field Engineering
Colin Armorel
- Subsystem support (Rail and Bus)

Systems Maintenance
Jason Miles
- Bus and Rail on-board systems
- Farebox
- Wayfinding

Materials Management
Omar Massiah
- Warehouse and stockroom services for Bus, Rail, Mover, and PW
- New Part Warranty for Bus, Rail and Mover

MDC099

*Interim

Effective Date: May 27, 2024

Eulois Cleckley, Director and CEO

APPENDIX C

12 Risk-Based Inspection Program

12.1 Authority to Conduct Inspections

12.1.1 Purpose

The purpose of this section is to outline the legal authorities that grant FDOT the ability to conduct the risk-based inspection programs contained in this manual consistent with the requirements of 49 CFR Part 674, 49 U.S.C §5329, Rule 14-15.017, F.A.C., and the FDOT Program Standard.

12.1.2 Background

On November 15, 2021, President Biden signed the Bipartisan Infrastructure Law, enacted as the Infrastructure Investment and Jobs Act, which continues the public transportation safety program. The Bipartisan Infrastructure Law amended 49 U.S.C § 5329 to require State Safety Oversight Agencies (SSOAs) to conduct risk-based inspections of the rail fixed guideway public transportation systems that the SSOA oversees.

A risk-based inspection program uses qualitative and quantitative data analysis to inform ongoing inspection activities. Risk-based inspection programs are designed to prioritize inspections to address safety concerns and hazards associated with the highest levels of safety risk

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12.1.3 Authorities

In accordance with the 49 CFR Part 674, 49 U.S.C § 5329, Rule 14-15.017, F.A.C., and the FDOT Program Standard, FDOT has the authority to conduct inspections at any time of FGTS facilities and property that FDOT oversees, through scheduled and unscheduled on-site activities to the FGTSs. At a minimum, FDOT has explicit authority to access the following to inspect the infrastructure, equipment, records, personnel, and data including the data that the fixed guideway public transportation agency collects when identifying and evaluating safety risks.

The risk-based inspections shall be conducted announced or unannounced in response to the safety risk assessments of individual rail safety events such as accidents, incidents, occurrences, hazards, or trends of such events.

12.1.4 Capabilities

When FDOT conducts inspections, the FGTS shall not refuse access to an authorized FDOT representative to any documents, discussions, meeting, or activities. FDOT shall maintain keycards/badges to ensure unrestricted access to FGTS facilities. The FGTS shall not refuse FDOT access to any personnel. Furthermore, contractors and vendors of the FGTS shall not refuse FDOT physical or informational access. FDOT and its authorized representatives shall have full access to FGTS equipment, infrastructure, and practices unless access violates FGTS safety procedures. FDOT and the FGTS shall ensure access to equipment and infrastructure follows the FGTS's wayside, facility, or other controlled-area access programs.

The FDOT SSO Program Manager and staff will maintain all required FGTS training and certification (such as Roadway Worker Protection/Track Access) to access FGTS property as needed and in compliance with FGTS rules. FDOT contractors must also complete requisite training and maintain certification to access the right-of-way as required by each FGTS. When FDOT personnel or contractors need to access the right-of-way, FDOT will coordinate such access through appropriate FGTS safety and security departments

and/or relevant maintenance or operations groups. FDOT, in consultation with each FGTS that FDOT oversees, shall establish policies and procedures regarding the access of the FDOT to conduct inspections of the FGTSs including access for inspections that occur without advance notice to the FGTSs. FDOT shall document its inspector training statuses and certifications in the current version of the Technical Training Plan (TTP).

FDOT shall also ensure that all personnel conducting inspections as part of risk-based inspection programs have the required technical expertise to perform their duties safely during inspections. The FDOT SSO Program Manager or authorized designee has the authority to conduct inspections on FGTS property, including unannounced inspections. Inspections by FDOT SSO Program personnel shall include:

- Immediate safety concerns
- FDOT and FGTS inspection reports
- event verification, ongoing monitoring
- defects and corrective/remedial actions
- corrective action plan (CAP) and safety risk mitigation verification
- previously identified deficiencies and areas of concern
- FDOT triennial audits
- FGTS internal safety reviews
- Emergency exercises and emergencies

12.2 Planning and Conducting Inspections

12.2.1 Scheduling Inspections

FDOT is authorized to conduct risk-based inspections with and without advance notice. As such, FDOT requires the FGTS to assist and cooperate with announced and unannounced risk-based inspection activities. FDOT and the FGTS will identify and mutually agree upon the FGTS facilities and property that will require an FGTS escort for all SSOA inspections, announced or unannounced. These facilities and properties may include but are not limited to:

- Dedicated guideways not associated with a publicly accessible streetcar or light rail system
- Traction power substations
- Signal houses
- Electrical and mechanical rooms
- Maintenance shop areas outside of a designated “safe walk” zone or areas where access requires an additional level of personal protective equipment such as inspection pits and paint rooms
- Locations containing confidential employee files where access to the area would also grant access to the files

FDOT staff will not enter agreed-upon inaccessible areas without an FGTS escort. FDOT staff, including support contractors, will inform the FGTS CSO or designee when staff are or will be onsite inspecting these areas. When arriving at the FGTS property, FDOT staff will gather at a safe location, such as a main entrance or reception area, and await an FGTS escort.

Announced Inspections

The FDOT Program Manager, or designee, shall provide notice to an FGTS of an on-site announced risk-based inspection with at least seven days advance notice. The advance notice shall include the

composition of the FDOT team, an agenda/schedule of on-site activities, a list of data and documents to be requested, and a list of the personnel/departments to be interviewed.

FDOT reserves the right to modify its agendas based on new risks that emerge or items that are discovered during an announced inspection that warrant further SSOA review (e.g., a deficient condition, cases of non-compliance with safety rules).

FDOT reserves the right to conduct announced inspections on a shorter time frame than the seven-day period if a situation warrants a more immediate inspection that may not qualify as an inspection that requires no announcement.

Inspections without Advance Notice
FDOT may or may not provide key FGTS safety office staff with advance notice of FDOT risk-based inspections from public transit areas (e.g., in stations and on vehicles).

When coordinated access is required to ensure worker safety, the FDOT Program Manager, or designee, shall provide notification to the FGTS as closely as safely possible to the time of the risk-based inspection to key FGTS safety office staff of a risk-based inspection. Coordination for safety purposes shall be paramount to ensure FDOT and the FGTS comply with FGTS rules, policies, and procedures for access to wayside and controlled areas to not be exposed to safety risks or create hazardous conditions. The notification shall include the date/time of the inspection, and personnel or departments to be interviewed, and any areas where coordinated access shall be granted by the FGTS to FDOT. The notification shall be limited to key safety staff to ensure minimal advance planning on the part of the FGTS.

The FGTS shall provide current rulebooks and associated procedures. FDOT shall abide by them, including personal protective equipment requirements.

12.2.2 Inspection Reports

Upon completion of an inspection, the FDOT SSO Program Manager or designee will provide the FGTS a report that describes what was inspected or reviewed, including the identification of specific facilities, equipment, or data that FDOT inspected, and any findings, and recommendations within 30 days of the completion of the inspection. When FDOT identifies any deficiency, the deficiency shall be communicated to the FGTS as soon as practicable prior to the issuance of the report. FDOT shall issue objective inspection reports utilizing data to include, but not limited to, photographs and measurements. FDOT shall typically issue a combined inspection report for each risk-based inspection site visit, however if risk-based inspections identify serious or high priority concerns, FDOT may issue separate reports.

FDOT shall track risk-based inspections internally using a tracking sheet that includes how FDOT identified the need for inspection, the date FDOT conducted the inspection, the findings from the inspection, the date FDOT issued the report, a summary of follow-up actions taken to ensure the FGTS implemented appropriate mitigations, and the status of mitigations.

12.2.3 Immediate Safety Concerns

If an immediate safety concern is identified by FDOT, the inspector will ensure safety of all involved, and immediately notify the SSO Program Manager, who will convey the concern to the Transit Safety Manager. The inspection report will detail any immediate safety concern and the FGTS immediate response. FDOT shall track findings and monitor mitigations. If an FDOT inspector identifies an immediate safety concern, they shall cease all inspection activities and perform the necessary communications, including removing

personnel from the area to a safe location. An immediate safety concern that requires immediate notification to the SSO Program Manager may include, but is not limited to the following:

- Security concerns such as criminal activities and suspicious items
- Inclement weather or threat of inclement weather
- Personnel conduct including disregard for safety procedures or suspected fatigue or impairment
- Equipment or infrastructure related concerns such as damaged or missing safety features, unsafe or improper operation, or safety related conditions including, but not limited to, rail defects, track related damage or obstructions, overhead contact system or third rail damage or malfunction, signal related damage or malfunction, vehicle damage or component malfunction; facilities safety concerns such as fire, electrical or other life safety concerns

12.2.4 Inspections of Equipment and Infrastructure Specific to Each FGTS

FDOT will thoroughly and consistently conduct inspections on the various procedures used to maintain the equipment, infrastructure, and practices of each FGTS. The number and type of inspections will be determined through the RBI prioritization process. Categories and subcategories of FGTS equipment, infrastructure, and practices FDOT may inspect include but are not limited to:

Categories	Subcategories
FGTS Equipment	Revenue Vehicles Non-revenue Vehicles Shop Equipment
FGTS Infrastructure	Track Structure Stations Shop Facilities Traction Power Infrastructure Signals and Train Control Components
FGTS Practices	FGTS Rules Compliance Observations Fitness for Duty Training and Recertification RTA Employee Safety Reporting Program Event Investigations and Records Hazard Records Safety Risk Mitigation Records Verification of Safety Risk Mitigation Implementation Corrective Action Plan Development and Implementation Records of Near Misses Safety Performance Indicators Transit Worker Assault Prevention Management of Change Safety and Security Certification

12.2.5 Event Verification

When an event results in a fatality, serious injury, or substantial damage, FDOT shall inspect areas of FGTS events or areas with similar characteristics to those where an event occurred. FDOT event verification inspections must include, at a minimum:

- Coordination with the FGTS safety office to ensure worker safety and authorized access to the work location.
- Assurance of post-event field conditions that show successful FGTS repairs.
- Access to and review of FGTS data (e.g., maintenance inspections, repair work orders, dispatching logs, video footage, radio recordings, train control system playback) to determine probable cause and to support the identification of hazards.

FDOT shall verify the FGTS is leveraging data and information collected through investigation activity to determine probable cause. Methods of FDOT verification shall include data analysis and on-site inspections. FDOT shall review hazard and safety risk registers, CAP tracking logs, control center data and recordings, maintenance inspections and repair work orders, and video footage. FDOT shall ensure the FGTS properly identifies and documents hazards, identified through the investigation of an event.
This does not preclude FDOT from inspecting areas where events did not meet these thresholds.

12.2.6 Ongoing Monitoring

FDOT shall collect data to ensure that ongoing monitoring activities are performed. FDOT collects FGTS monthly reports on the fifth business day of each month which include hazard tracking logs, CAP tracking logs, completed event investigation reports, completed CAP verification documentation, and hazard investigation reports. FDOT also collects investigation status reports for open and ongoing investigations by the 15th of each month. FDOT performs regular site visits to assess conditions on-site at each FGTS. These site visits are conducted, at a minimum, quarterly at each FGTS. During the site visits, FDOT will assess employee performance of job functions and will determine if the employees perform the job functions in accordance with FGTS standards. On each site visit, FDOT shall observe control centers, maintenance facilities, and conduct ride checks. FDOT will observe additional FGTS facilities and infrastructure at least twice annually consistent with the inspection schedule in Appendix F.

12.2.7 Inspections of Defects and Corrective and Remedial Actions

FDOT shall inspect significant defects determined to be safety critical or impacting safety critical systems and subsystems, based on the defect's severity or quantity. FDOT shall track the implementation of corrective and remedial actions through the safety risk hazard and CAP tracking logs it receives on the 5th business day of each month. FDOT shall verify the closure of corrective and remedial actions through data analysis or on-site review. FDOT shall track defects and corrective or remedial actions.

12.2.8 Inspections of CAPs and Safety Risk Mitigation Verification

FDOT shall inspect FGTS areas and functions with open and delayed CAPs, as well as areas with open findings from external and internal audits and safety reviews. FDOT shall utilize FGTS databases, safety and hazard risk registers, employee safety reports (including anonymous reporting). Where applicable, FDOT shall utilize the FGTS inspection matrices located in Appendix F.

Each FGTS must request FDOT close a CAP once identified actions have been fully implemented. FDOT will verify the CAP has been implemented in compliance with the approved plan by reviewing evidence provided and/or inspecting the CAP or safety risk mitigation implementation first-hand. Section 10.5 of the FDOT Program Standard documents the Department's procedures for CAP verification and defines some of the SSOA's potential CAP verification activities. These activities include but are not limited to:

- Records reviews
- On-site inspections

- Unannounced site visits
- Observations
- Photographs
- Review of submitted documents
- Interviews with staff responsible for implementing the CAP
- Written FGTS requests for review and closure based on obsolescence of the CAP
- Or if the existing CAP has been replaced by a newer CAP, and so on, at the discretion of FDOT

12.3 Safety Risk Program Data

12.3.1 Data Collection, Assessment, and Management

In accordance with Safety Management System principles, each FGTS shall collect safety program data, maintenance data, and inspection data. The FGTS shall provide FDOT with the data the FGTS collects when identifying and evaluating safety risks. At a minimum, FDOT reviews and assesses safety program data on:

- JTA Skyway and HART TECO Line Streetcar: a monthly basis, inspection data on a quarterly basis, and maintenance data on an annual basis.
- DTPW Metromover on a bimonthly basis
- DTPW Metrorail on a weekly basis

The FGTS shall provide access to all requested forms of print and/or electronic data. FDOT and the FGTS shall follow FGTS procedures for access to safety- and security-sensitive information.

The FGTS shall provide access to CAP information and verification documentation to ensure FGTS documentation aligns with the CAP mitigation plan. FDOT and its authorized representatives reserve the right to request additional data and documentation, and to view the corrective action mitigation measures on-site.

FDOT requests for data will be based on event trends (including near misses); safety risk assessments performed by the SSOA or FGTSs; data collection required by the FGTS's PTASP; identified hazards; industry trends or significant events; internal and external audits; and results of onsite observations, employee and public allegations of non-compliance, inspections, and investigations performed by the FGTS or any external entity to include the SSOA, FTA, and NTSB.

12.3.2 SSOA Management of FGTS Data

FDOT and the FGTSs shall collaboratively determine the data security protocols to ensure cyber-security standards are met.

FDOT shall maintain a database of all data received by each FGTS. Data gathered to support the RBI Program will also be used to support other SSOA oversight activities, and vice versa. FDOT performs safety data analysis in-house using Microsoft products, and FDOT will use data gathered in support the RBI Program to support other SSOA oversight activities. FDOT will leverage all existing data management processes, procedures, and systems for the initial implementation of risk-based inspections. As the FGTSs share additional data with the oversight agency, FDOT shall implement a more robust data management, analysis, and storage solution to support the program's future growth commensurate with the number, size, and complexity of its FGTSs. To this end, FDOT will utilize lessons learned from the initial implementation process, as well as information shared by peer SSO Programs and guidance provided by the FTA to support the development of future data management solutions.

FGTS data shall be made available to all FDOT inspectors and organized using a folder structure that is chronological by year.

The FGTS shall ensure FDOT is made aware of all data systems used by the FGTS to identify hazards and assess safety risks. The FGTS shall allow FDOT to access their safety data systems through document requests, announced inspections, and inspections without notice. Upon request, the FGTS shall provide FDOT with training on the use of their safety data system(s).

The FGTSs may request the results of FDOT's RBI data analyses and information, and FDOT shall not restrict FGTS personnel access to RBI data analyses, information, and reports. FDOT shall maintain all RBI safety data and reports for a period of at least four (4) years. The primary method of RBI data storage shall be electronic using the Florida risk-based inspection data management system. RBI data, analyses, memos, and reports shall be stored using backed-up data servers. FDOT shall conduct periodic reviews of file organization and data retention to ensure proper and accurate filing and data storage.

Data Management policies and procedures will be developed and updated consistent with the data management tools in use, and procedures will include processes to demonstrate the SSOA's ability to accurately store records according to established procedures. When appropriate, FDOT will include input from the FGTS in the development and implementation of these policies and procedures. FDOT's data management procedures will detail:

- How FDOT data requests will be transmitted to the FGTS
- The time allotted to the FGTS for gathering and submitting the data as well as the method or mechanism by which the data will be submitted or shared with the SSOA
- How FDOT will verify information within the FGTS's data submissions
- How FDOT will analyze data
- How and where FDOT will store submitted data
- Who will have access to the data
- How the data will be organized
- How long records must be retained by FDOT
- How and when records are disposed of by FDOT
- How FDOT will maintain the system
- How FDOT will ensure the system accurately stores records

12.3.3 Safety Program Data

The FGTS shall provide FDOT with requested safety program data in the form and format requested and will make available any related supporting documentation or data related to the identification of hazards or the determination of safety risk associated with the shared information.

Example Safety Program Data Subcategories
Potential data records to be requested may include:

- Causal and contributing factors for events
- On time event reporting/notification
- Operations and maintenance observations and compliance checks
- Employee Safety Reporting Program reports

- Results of internal audits and inspections
- Safety briefings
- Data monitoring the effectiveness of mitigations
- Data collected via industrial safety, fire/life safety, construction safety, and environmental compliance activities

12.3.4 Maintenance Data

The FGTSs shall provide maintenance data documenting activities and results of vehicle, wayside, and facility maintenance programs for all FGTS facilities and programs requested by the SSOA. The data will be provided in the form and format requested and the FGTSs will make available any related supporting documentation or data related to the identification of hazards or the determination of safety risk associated with the shared information.

Example Maintenance Data Subcategories
Potential data records to be requested may include:

- Work Order descriptions and priority
- Open work orders and repair trends
- Adherence to maintenance schedules
- Preventative maintenance inspection Reports
- Transit asset management plan and associated data
- Facility occupational injury and inspection data
- Tool calibration records
- Non-revenue vehicle inspection reports
- Equipment Failures

12.3.5 Inspections

FDOT inspections shall be commensurate with size and complexity of each FGTS including route miles, technologies, ridership, and new and emerging safety risks. The FGTSs shall provide inspection data for the FGTS's various safety assurance and verification activities and processes. The FGTS shall provide the form and format of data requested by FDOT. The FGTS shall make available any related supporting documentation or data related to the identification of hazards or the determination of safety risk. FDOT shall not request forms and formats of safety data which it is not usually stored in.

Example Inspection Data Subcategories
Potential data records to be requested may include:

- Facility Inspection Reports
- Environmental reports
- Safety Critical Infrastructure inspections
- ROW Inspections
- Capital Project Data
- Management of Change data

12.3.6 FGTS Data Sources

FDOT requests for data shall be based on event trends (including near misses); safety risk assessments performed by FDOT or FGTSs; data collection required by the FGTS's PTASP or NTD; identified hazards; industry trends or significant events; internal safety reviews and external audits; and results of onsite observations, employee and public allegations of non-compliance, inspections, and investigations performed by the FGTS or any external entity to include FDOT, FTA, and NTSB.

Categories and subcategories of FGTS data FDOT may request include but are not limited to:

Categories	Subcategories
Operations Data	Data listed in the PTASP FGTS Rules Compliance Observations Fitness for Duty Data Recertification Data
Maintenance and Inspection Data	Vehicle inspection reports Wheel circumference System critical activities Track inspection and maintenance Signal system inspection and maintenance Power distribution system inspection and maintenance
Safety Data	FGTS Employees Safety Reporting Program Event Investigation Data PTASP Safety Performance Targets Safety Key Performance Indicator Data Transit Worker Assault Infectious disease mitigations Joint labor-management safety committee meeting minutes and data
Engineering	Track Inspection Reports System Critical Activities Bridge, Tunnel, and Infrastructure Inspection Data
Additional Data Sources	Relevant Environmental and Occupational Health Data User Knowledge, Skills and Abilities Training records and program data Lessons Learned from Legacy and other Systems

12.3.7 CAP and Safety Risk Mitigation Verification

Each FDOT inspection shall include an evaluation of open CAPs and safety risks. FDOT personnel shall use the current version of the RFGPTS CAP log (included in the FGTS monthly report due to FDOT on the fifth business day of each month) to evaluate open CAPs and safety risks.

FDOT shall work with the FGTS safety office to coordinate the update and/or closure of CAPs during and following risk-based inspections.

FDOT inspections shall include mitigation verification to assess areas of potential practical drift where implementation occurs over time. FDOT shall ensure its verifications align with approved FGTS mitigation monitoring plans.

12.4 Inspection Prioritization

FDOT shall assess each FGTS monthly report for any new or emerging safety risks and prioritize inspections to address highest safety risk conditions based on frequency and severity/consequence of the safety risk. To assess the highest safety risks, FDOT shall consider the following safety metrics:

- Defects
- Areas where deviation from rules compliance has been documented or observed, including deviation from inspection schedules
- Areas where insufficient staffing levels exist or are projected
- Safety events that resulted in a fatality, serious injury, damage to equipment, infrastructure or the environment, or safety events where multiple causal factors were identified
- Open corrective action plans, particularly those with longer-term estimated completion dates
- Hazards with higher likelihood and severity ratings
- Repeat internal safety review and external audit findings
- Areas or situations where similar issues have previously experienced trends in the past X years

FDOT will maintain data that quantifies the safety metrics listed above, analyze the data to determine if conditions are resulting in increased safety risks, and will act on those quantitative analyses through risk-based inspections. FDOT and the FGTSs shall utilize the safety risk/hazard management methodology and procedures stated in Section 6 for identification, reporting, rating, mitigation, monitoring, and prioritization of safety risks. FDOT shall develop a prioritization score or rating for each safety metric identified above. Safety risk frequency and severity shall inform FDOT's and the FGTSs risk-based inspection activities using MIL-STD-882E. FDOT shall have final determination if FGTS CAPs are required and shall follow the process in Section 10 of the SSO Manual.

12.5 Data Management

FDOT shall maintain a database of all data received by each FGTS. FDOT shall maintain FGTS safety data electronically for at least four years.

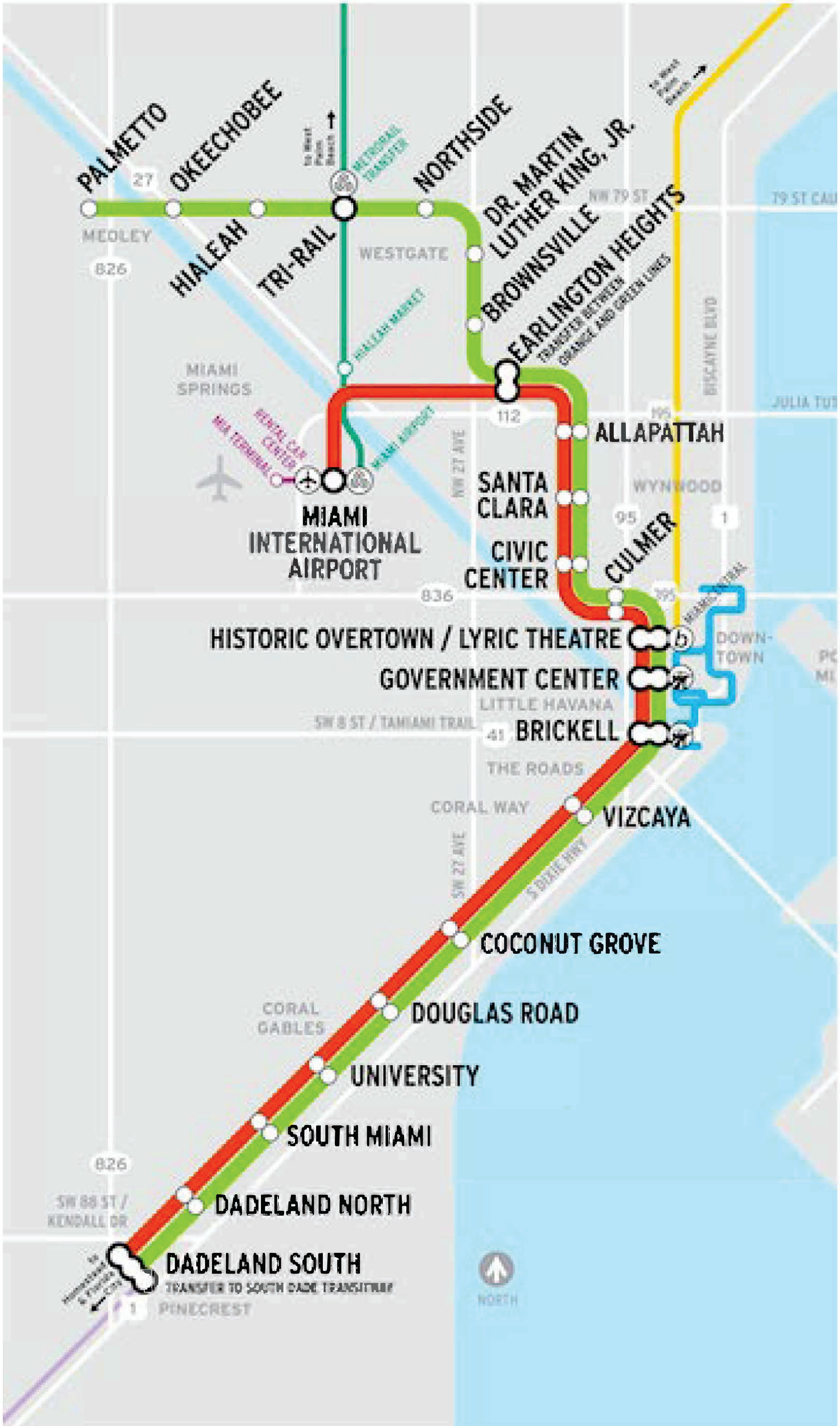
FDOT shall revise and expand its existing data management policies and procedures to accommodate the needs of the RBI Program. When appropriate, FDOT will include input from the FGTS in the development and implementation of these policies and procedures. FDOT's Data Management procedures (currently under revision) will include, but will not be limited to:

- How FDOT will transmit SSOA data requests to the FGTSs
- The time allotted to the FGTSs for gathering and submitting the data
- The method or mechanism by which the FGTSs will submit or share the data with the SSOA
- The frequency by which the requested data must be provided to the SSOA by the FGTSs
- How the SSOA will verify and validate information within the FGTS's data submissions
- How the SSOA will analyze the FGTS's data
- How and where the SSOA will store and organize the FGTS's submitted data
- How the SSOA will control access and accessibility to the FGTS's submitted data
- How long the SSOA must retain records and the process for record disposal

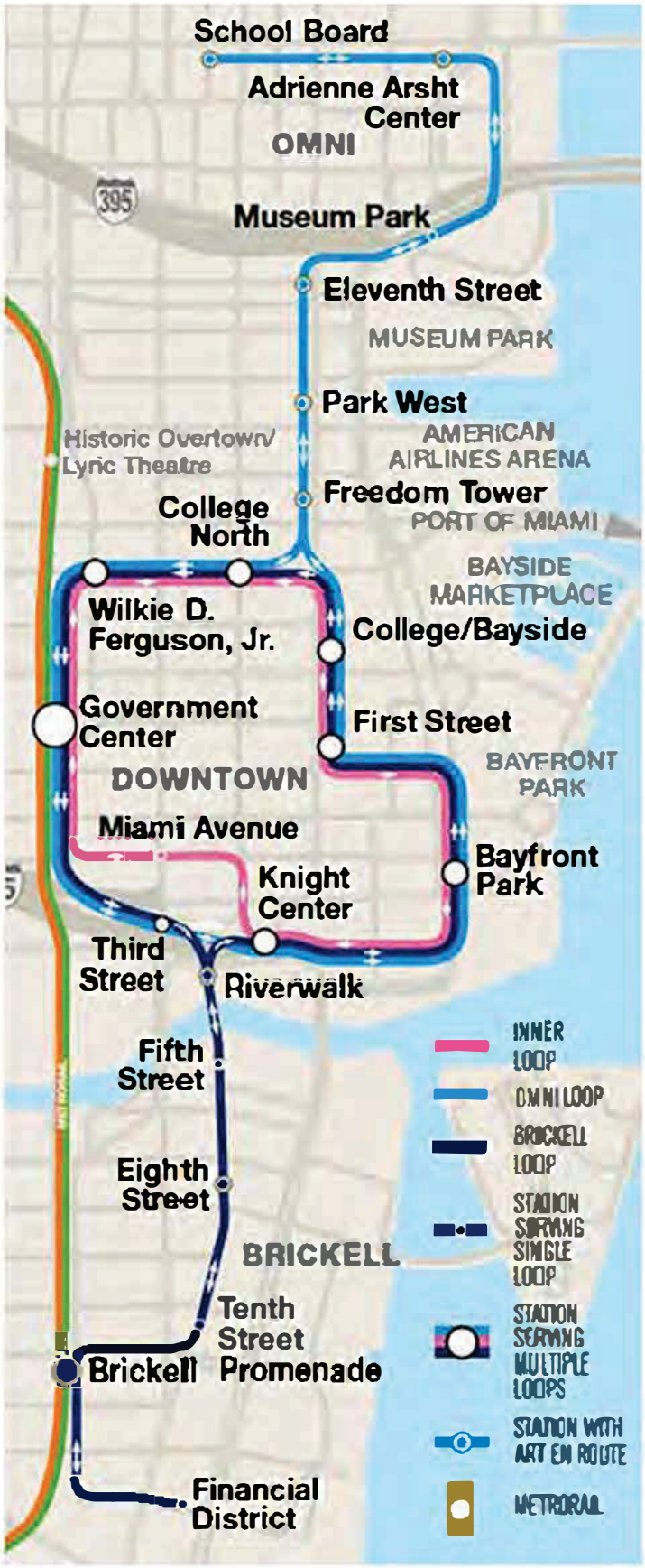
- How the SSOA will maintain the system and it validate the accuracy of stored records

All data the FGTSs provide shall comply with FTA and SSOA guidelines and requirements for data reporting, as well as the internal policies of each agency regarding the security, data protection, and privacy of information as approved by the SSOA.

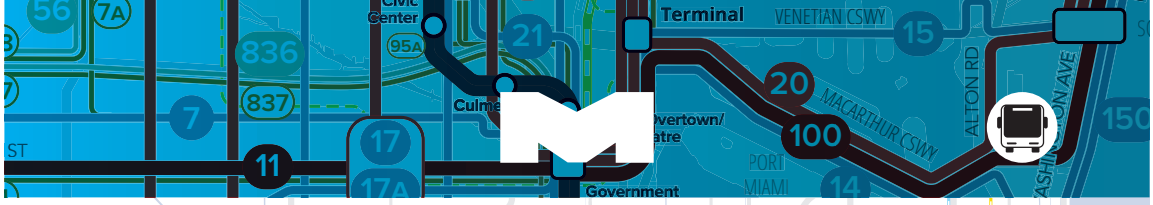
APPENDIX D


PALMETTO
OKEECHOBEE
HIALEAH
TRI-RAIL
NORTHSIDE
DR. MARTIN LUTHER KING, JR.
BROWNSVILLE
EARLINGTON HEIGHTS
TRANSFER BETWEEN ORANGE AND GREEN LINES
ALLAPATTAH
SANTA CLARA
CIVIC CENTER
CULMER
MIAMI INTERNATIONAL AIRPORT
HISTORIC OVERTOWN / LYRIC THEATRE
GOVERNMENT CENTER
BRICKELL
VIZCAYA
COCONUT GROVE
DOUGLAS ROAD
UNIVERSITY
SOUTH MIAMI
DADELAND NORTH
DADELAND SOUTH
TRANSFER TO SOUTH DADE TRANSITWAY
MEDLEY
WESTGATE
MIAMI SPRINGS
WYNWOOD
DOWNTOWN
LITTLE HAVANA
THE ROADS
CORAL WAY
CORAL GABLES
PINECREST
NW 79 ST
79 ST CAU
NW 27 AVE
SW 27 AVE
BISCAYNE BLVD
SW 8 ST / TAMIAMI TRAIL
S DIXIE HWY
SW 88 ST / KENDALL DR
NORTH
826
27
112
95
195
836
41
1

APPENDIX E


School Board
Adrienne Arsht Center
OMNI
395
Museum Park
Eleventh Street
MUSEUM PARK
Park West
Historic Overtown/ Lyric Theatre
AMERICAN AIRLINES ARENA
Freedom Tower
College North
PORT OF MIAMI
BAYSIDE MARKETPLACE
Wilkie D. Ferguson, Jr.
College/Bayside
Government Center
First Street
DOWNTOWN
BAYFRONT PARK
Miami Avenue
Bayfront Park
Knight Center
Third Street
Riverwalk
Fifth Street
Eighth Street
BRICKELL
Tenth Street Promenade
Brickell
Financial District
INNER LOOP
OMNI LOOP
BRICKELL LOOP
STATION SERVING SINGLE LOOP
STATION SERVING MULTIPLE LOOPS
STATION WITH ART EN ROUTE
METRORAIL

APPENDIX F



MIAMI-DADE COUNTY

METROBUS SYSTEM

SISTEMA DEL METROBÚS • SISTÈM METROBUS

APRIL 2024 • ABRIL 2024 • AVRIL 2024

Metrobus routes • Rutas de Metrobús • Wout Metrobus

During weekdays at midday, the bus comes every...
Los días laborables durante el horario del mediodía, el autobús pasa cada...
Pandan lasemèn, nan mitan jounen, otobis la vini chak...

- 10 minutes or less • minutos o menos • minit oswa mwens
- 15 minutes • minutos • minit
- 20 minutes • minutos • minit
- 30 minutes • minutos • minit
- 60 minutes • minutos • minit
- Peak-Only or Limited Service
  Servicio limitado o solamente en horas pico
  Edepwent sèlman oswa sèvis limite

Other transit services

Otros servicios de transporte público • Lòt sèvis transpò piblik

- MetroConnect Zone
  Zona de servicio de MetroConnect
  Zòn MetroConnect
- Metrorail and Station
  Metrorail y estación
  Metrorail ak estasyon
- Metromover and Station
  Metromover y estación
  Metromover ak estasyon
- South Dade TransitWay Stations
  Estaciones de transporte rápido de South Dade TransitWay
  Estasyon TransitWay South Dade
- Tri-Rail
- Brightline

This is a general reference map. Consult individual route maps for details.
Use este mapa como referencia general. Para más detalles, consulte el mapa específico de cada ruta.
Sa se yon kat referans jeneral. Konsilte kat jeografik ansa yo patikilye pou plis detay.

Some routes combine to provide higher frequency on a single route.
Algunas rutas se unen para proveer servicio más frecuente en una sola ruta.
Genyen kèk wout ki konbine pou ofri plis frekans sou yonn sèl wout.

Route branches
Rutas ramales
Anbranchman paleso

Combined on a single route
Combinado en una sola ruta
Konbine sou yon sèl wout

MIAMI BEACH

DOWNTOWN ↔ MIAMI BEACH

DOWNTOWN MIAMI

CUTLER BAY

miamidade.gov/transportation

@GoMiamiDade

GO Miami-Dade Transit

miamidade.gov/transportation 311 or 305.468.5900 TTY/Florida Relay: 711

MIAMI-DADE COUNTY

MDC117