

EXHIBIT "A"



Pittsburgh Regional Transit



Public Transportation Agency Safety Plan

December 2022

PTASP - Taking PRT Safety into Tomorrow



TABLE OF CONTENTS

LIST OF ACRONYMS	11
DOCUMENT CONTROL	14
TRANSIT AGENCY INFORMATION	15
PTASP PLAN CERTIFICATION	16
1.0 INTRODUCTION	17
1.1 PRT’s Support of Safety Management System Principles	19
1.2 System Description	20
1.3 General Overview and History	20
1.3.1 Administrative Offices	20
1.3.2 Facilities and Rail Maintenance Shops	21
1.3.3 Light Rail Transit System	22
1.3.4 Stage I LRT Program	22
1.3.5 Stage II LRT Program.....	22
1.3.5.1 North Shore Connector.....	23
1.3.5.2 Current Rail Operations.....	23
1.3.5.3 Physical Plant.....	26
1.3.5.4 Rail Revenue Vehicles (LRVs).....	31
1.3.6 Bus Operations	33
1.3.6.1 Revenue Buses	34
1.3.6.2 Bus Facilities	34
1.3.6.3 Busways	37
1.3.7 Inclined Planes.....	39
1.3.8 Access for Paratransit System	39
1.4 Weather.....	39
2.0 SAFETY MANAGEMENT POLICY	40
2.1 PRT Safety Management System Policy Statement.....	40
2.2 Scope and Purpose of Public Transportation Agency Safety Plan	41
2.2.1 Scope.....	41
2.2.2 Purpose	42
2.3 Annual Assessment	43
2.4 RTSRP Requirements	44

2.4.1	Submittal Procedure.....	44
2.4.2	Review and Approval Procedure	44
2.5	PRT Internal PTASP Review and Approval Process	45
2.5.1	PTASP Revisions.....	45
2.5.2	PTASP Revision Schedule	46
2.5.3	Implementing PTASP Revisions	46
2.6	Goals and Objectives.....	47
2.6.1	Goals	47
2.6.2	Objectives	48
2.7	Safety Accountabilities, Responsibilities and Functions.....	50
2.7.1	Chief Executive Officer	51
2.7.2	Chief Legal Officer	51
2.7.2.1	Director of Claims Department.....	52
2.7.2.2	Director of Internal Audit Department.....	52
2.7.2.3	Director of Legal and Consulting Services.....	53
2.7.2.4	Chief of Police and Security Services.....	53
2.7.3	Chief Safety Officer	53
2.7.4	Chief Communications Officer	55
2.7.5	Chief Human Resources Officer.....	55
2.7.5.1	Benefits	56
2.7.5.2	Compensation	56
2.7.5.3	Employee Assistance Program	56
2.7.5.4	Employee Relations/Office of Equal Opportunity.....	56
2.7.5.5	Employment and Development Department	56
2.7.6	Chief Strategy Officer.....	57
2.7.6.1	Accounting Department	57
2.7.6.2	Financial Planning and Budgets Department	57
2.7.6.3	Cash Management.....	57
2.7.6.4	Purchasing and Materials Management	58
2.7.6.5	Grants and Capital Programs	58
2.7.7	Chief Information Officer	58
2.8	Chief Operating Officers – Transportation/Maintenance	59
2.8.1	Deputy Chief Operating Officers.....	59

2.8.2	Director of Road Operations.....	59
2.8.3	Directors of Bus Service Delivery	60
2.8.4	Director of Bus and Rail Operations	61
2.8.5	Director of Rail Service Delivery.....	61
2.8.5.1	Assistant to the Director of Rail Service Delivery	62
2.8.5.2	Manager of Railcar Maintenance	62
2.8.5.3	Manager of Track and Way	63
2.8.5.4	Manager of LRT Systems and Power	64
2.8.5.6	Manager of Facilities	66
2.8.5.7	Director of Training	67
2.8.5.8	Manager of Maintenance – Bus	68
2.8.5.9	Manager of Bus Maintenance Support.....	69
2.8.5.10	Manager of Vehicle Projects.....	69
2.8.5.11	Business Analyst – Operations	70
2.8.5.12	Manager of Main Shop.....	70
2.8.5.13	Manager of Non-Revenue Vehicle Maintenance	71
2.9	Chief Development Officer	72
2.9.1	Service Development.....	72
2.9.2	Planning	73
2.9.3	Engineering/Technical Support.....	73
2.9.3.1	Director of Technical Support/Capital Programs.....	73
2.10	Operations Safety and Security Review Committee (OSSRC)	75
2.10.1	Operations Division Safety Committees	77
2.10.2	Safety Event Review Team (SERT)	78
2.11	Safety Tasks	78
2.12	PRT SMS Policy Overview	78
2.13	Activities Required to Implement PTASP	79
2.13.1	Tasks Performed by Safety Unit	80
2.13.1.1	Chief Safety Officer	80
2.13.1.2	Deputy Chief Safety Officer	81
2.13.1.3	Safety Officer	82
2.13.1.4	Manager of Occupational Health & Safety.....	82
2.13.1.5	Associate OHS and Training Officer.....	83

2.13.2	Safety Tasks Performed by Other PRT Divisions	85
2.13.2.1	Transportation - Operations.....	86
2.13.2.2	Transportation - Maintenance.....	92
2.13.2.3	Development, Engineering and Planning Division.....	94
2.13.2.4	Strategy Division	96
2.13.2.5	Human Resources Division.....	97
2.13.2.6	Communications Division	98
2.13.2.7	Information Technology Division	99
2.14	Rules Compliance/Procedures Review.....	100
2.14.1	Operating and Maintenance Rules and Procedures.....	100
2.14.1.1	Rail System Rules.....	101
2.14.1.2	Bus Standard Operating Procedures	101
2.14.1.3	Rail System Standard Operating Procedures.....	101
2.14.1.4	Bulletins, Notices, and Orders	102
2.14.2	Techniques for Employee Compliance	102
2.14.2.1	Operations Personnel	102
2.14.2.2	Maintenance Personnel	103
2.14.3	Techniques for Supervisory Compliance.....	103
2.14.3.1	Operations Supervisors	103
2.14.3.2	Maintenance Supervisors	103
2.14.4	Compliance Documentation	104
2.14.4.1	Observation Results	104
2.14.4.2	Hazard Management Process Coordination.....	104
2.15	Facilities and Equipment Safety Inspections.....	104
2.15.1	Facilities and Equipment Subject to Inspection	104
2.15.2	Inspection Techniques	107
2.15.3	Inspection Schedules and Procedures.....	107
2.15.4	Inspection Documentation	108
2.15.4.1	Results	108
2.15.4.2	Coordination with Hazard Management Process.....	108
2.16	Maintenance Audits/Inspections Program.....	109
2.16.1	Maintenance Cycles.....	109
2.16.2	Program Documentation	111

2.16.3	Coordination with Hazard Management Process.....	112
2.17	Integration with Public Safety and Emergency Management	112
2.17.1	Allegheny County Emergency Management Plan	113
2.17.2	Meetings with External Agencies	113
2.17.3	Pittsburgh Regional Transit Emergency Management Plan.....	113
2.17.4	Emergency Management Evaluation	114
2.17.5	Implementation of Findings	116
2.17.6	Revisions to Emergency Management Plan.....	116
2.17.7	Familiarization Training	117
2.17.8	Employee Training.....	120
2.18	Responsibility for Emergency Management	120
2.18.1	Emergency Operations Center (EOC)	120
2.18.1.1	Activation Criteria	121
2.18.1.2	Activation of the EOC	121
2.18.1.3	Functions of the Emergency Operations Center	121
2.18.1.4	Levels of Emergency.....	122
2.18.1.5	EOC Management.....	123
2.19	Threat and Vulnerability Management Process	125
2.20	SMS Documentation and Records	125
3.0	SAFETY RISK MANAGEMENT	126
3.1	Safety Risk Identification, Assessment, Mitigation, Monitoring	126
3.2	Regulatory Requirements.....	126
3.3	RTSRP Requirements	126
3.4	Pittsburgh Regional Transit Safety Risk Management Process	127
3.4.1	Overview	127
3.4.2	Safety Risk Management Methodology	129
3.4.3	Safety Risk Investigation, Assessment, Mitigation and Monitoring	133
3.4.3.1	Safety Risk Investigation	133
3.4.3.2	Safety Risk Assessment.....	134
3.4.4	Safety Risk / Hazard Control and Elimination	136
3.4.4.1	Hazard Risk Indices.....	136
3.4.4.2	Acceptance Criteria	137
3.4.4.3	Safety Risk/Hazard Resolution Precedence	138

3.4.4.4 Safety Risk/Hazard Tracking.....	138
3.4.4.5 Hazard Resolution Schedule.....	139
3.5 Coordination with State Safety Oversight Program	140
3.5.1 Reporting	140
3.5.2 Corrective Action	140
3.5.2.1 Cause for Initiation of Corrective Action Plan	141
3.5.2.2 Corrective Action Plan Required Components	142
3.5.2.3 Corrective Action Plan Schedule & Format	143
3.5.2.4 RTSRP Corrective Action Plan Review & Approval	143
4.0 SAFETY ASSURANCE.....	145
4.1 Safety Performance Monitoring.....	145
4.2 Management of Change.....	145
4.2.1 Coordination.....	146
4.2.2 Safety Reviews.....	147
4.2.3 Safety-Related Testing	147
4.2.4 Acceptance	148
4.2.5 Hazard Management	148
4.3 Safety and Security Certification Program	148
4.3.1 Responsibilities	149
4.3.2 Purpose	149
4.3.3 Objectives	150
4.3.4 Implementation	150
4.3.5 Verification and Approval	152
4.4 Configuration Management.....	153
4.4.1 Description of Process	153
4.4.2 Authority for Change and Notification.....	154
4.5 Safety Performance Monitoring and Measurement	154
4.5.1 Safety Performance Indicators and Targets.....	154
4.5.2 Safety Performance Measures/Targets by Mode.....	156
4.6 Safety Assurance - Safety Performance Monitoring and Continuous Improvement	158
4.6.1 Internal Audit - Safety Audit Process	158
4.6.1.1 Department and Functions Subject to Review	158

4.6.1.2 Purpose and Objectives of Safety Audits.....	159
4.6.1.3 RTSRP Requirement	159
4.6.1.4 Responsibility for Scheduling Reviews.....	160
4.6.1.5 PRT Safety Audit Processes and Procedures	160
4.7 Accident/Incident Investigation Reporting Section Overview.....	164
4.8 Accident/Incident Notification Procedures	165
4.8.1 Internal Notification.....	165
4.8.2 FTA and RTSRP Notification	168
4.9 Accident/Incident Investigation Process and Procedures	169
4.9.1 Process	169
4.9.1.1 Accident Investigation Site Team.....	169
4.9.1.2 Accident Investigation Oversight Team	169
4.9.1.3 Derailment Committee	170
4.9.1.4 Training	170
4.9.2 Accident/Incident Reporting and Documentation	171
4.9.3 Accident Analysis.....	172
4.10 Safety Data Acquisition and Analysis	172
4.10.1 Data Acquisition	173
4.10.2 Data Analysis.....	174
4.10.3 Data Access	174
4.11 External Specialized Expertise	175
4.12 Corrective Actions	175
4.12.1 Causes for Initiation of Corrective Action Plan.....	176
4.12.2 Immediate/Emergency Corrective Actions	178
4.12.3 Corrective Action Plan Dispute Resolution	178
4.12.4 Corrective Action Plan Required Components	178
4.12.5 Corrective Action Plan Schedule and Format	179
4.12.6 RTSRP Corrective Action Plan Review and Approval	179
4.12.7 Rejection or Modification of Corrective Action Plans	180
4.12.8 RTSRP Verification and Closure of Corrective Action Plans.....	180
4.13 Ensuring CAP Effectiveness.....	181
4.14 Accident and Incident Reporting.....	181
4.14.1 Internal	181

4.14.2	External	182
4.15	Coordination with Oversight Agency	182
4.15.1	RTSRP Investigations Responsibilities	182
4.15.2	RTSRP Requests System Safety Produce a Formal Report	182
4.15.3	Other Oversight Agency Conducts Investigation	184
4.15.4	Joint Investigations	184
4.15.5	Safety Risk/Hazard, Incident, and Other Investigations	185
4.15.6	RTSRP Conducts Investigation	185
4.15.7	RTSRP Accident Investigation Procedures	186
4.16	Drug and Alcohol Program	187
4.17	Hours of Service (HOS)	188
4.18	Fitness for Duty	188
4.19	Procurement Procedures	189
4.20	Hazardous Materials Program	189
5.0	SAFETY PROMOTION	190
5.1	Competence, Training, and Safety Communication Overview	190
5.2	Training Competence Program	190
5.2.1	Safety-Related Work Training	191
5.2.2	Descriptions of Training Programs	192
5.2.2.1	Bus System Training	192
5.2.2.2	Rail System Training	193
5.2.3	PRT Roadway Worker Protection Program	195
5.2.4	Training Records	195
5.2.5	Compliance with Training and Certification Program	196
5.3	Employee and Contractor Safety Program	196
5.3.1	Occupational Safety and Health	196
5.3.1.1	Safety Policy and Guidelines Manuals	196
5.3.1.2	Safety Program Requirements	197
5.3.2	Compliance with Safety Program	198
5.3.3	Employee Safety Reporting	198
5.3.3.1	Non-Punitive Reporting – Purpose	200
5.3.3.2	Non-Punitive Reporting Statement	200
5.3.4	Public and Customer Safety Reporting	200

5.4	Safety Communication	201
5.4.1	Safety Communication Methodology.....	201
5.4.2	Safety Communication Social Media	201
5.5	Infectious Disease Prevention and Control	201
	APPENDICES	202
	APPENDIX A - Definitions	203
	APPENDIX B – Regulatory History	209
B1.	Port Authority Act.....	209
B2.	Federal Transit Act	209
B3.	Authority Under 49 U.S.C. 5329(e).....	209
B4.	Authority Under 49 CFR 674.....	210
B5.	RTSRP Oversight of 49 CFR 673	210
B6.	Authority under Pennsylvania’s Act 89.....	210
B7.	Pennsylvania Rail Transit Safety Review Program	210
B8.	Bi-partisan Infrastructure Law.....	211
	APPENDIX C – SMS Policy Statement	215
	APPENDIX D – Organizational Chart.....	214
	APPENDIX E – Sample Corrective Action Log.....	217
	APPENDIX F – Weather	218
	APPENDIX G – RTSRP Decision Tree	219
	APPENDIX H – Reporting Thresholds.....	220

LIST OF TABLES

Table 1 - PTASP Revision Schedule Table	46
Table 2 - SMS Program Goals	47
Table 3 – Safety Related Objectives	48
Table 4 – Key Staff	50
Table 5 - System Safety Unit and Operations Group Task Matrix	83
Table 6 - Facility Inspections	104
Table 7 - Equipment Inspections	106
Table 8 - Affected Facilities and Equipment	109
Table 9 - Periodic Facility/Equipment Inspection	110
Table 10 - Levels of Emergency	122
Table 11 - Required Safety Risk/Hazard Reporting Thresholds and Reporting Requirements ..	131
Table 12 - Risk Severity	134
Table 13 - Hazard Probability	135
Table 14 - Safety Risk Management Indices	136
Table 15 - Acceptance Criteria	137
Table 16 - Hazard Resolution Schedule	139
Table 17 - Safety and Security Objectives	150
Table 18 - Milestones for Safety and Security Certification Activities	151
Table 19 - Rail Transit and Incline Plane Performance Measures	156
Table 20 - Bus Transit Performance Measures	156
Table 21 - Paratransit (ACCESS) Performance Measures	157
Table 22 - External Notification	166
Table 23 - Data Access	174
Table 24 - Accident Classification	181
Table 25 - Safety Related Work Training Categories	191
Table 26 - Transit Coach Operator and CDL Training Topics	192
Table 27 - Rail Operator Training Program	193
Table 28 - Other Rail System Training Courses and Requirements	194
Table 29 - Safety Policy and Guidelines Manuals	196

LIST OF ACRONYMS

AE	Accountable Executive
AAR	Association of American Railroad Standards
AED	Automated External Defibrillator
ADA	Americans with Disabilities Act
ANSI	American National Standards Institute
APTA	American Public Transit Association
AREA	American Railway Engineers Association
AREMA	American Railway Engineering and Maintenance-of-Way
ASP	(Public Transportation) Agency Safety Plan
ASTM	American Society for Testing and Materials
ATC	Automatic Train Control
ATP	Automatic Train Protection
ATS	Automatic Trip Stop
BDA	Bidirectional Amplifier
BTO	Bus Traffic Operations
CAF	Construcciones y Auxiliar De Ferrocarriles
CAP	Corrective Action Plan
CCTV	Closed-Circuit Television
CDL	Commercial Driver's License
CEO	Chief Executive Officer
CFR	Code of Federal Regulations
CIS	Computer Information System
CM	Configuration Management
COO	Chief Operating Officer
CSO	Chief Safety Officer
DBE	Disadvantage Business Enterprise
DHS	Department of Homeland Security
DIMM	Division Information Messaging Monitor
DOR	Daily Occurrence Reports
DOT	Department of Transportation
EEO	Equal Employment Office
EMP	Emergency Management Plan
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
ESR	Employee Safety Reporting
FAST Act	Fixing America's Surface Transportation
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FRA	Federal Railroad Administration
FTA	Federal Transit Administration

GAR	Gap Analysis Report
G.P.S.	Global Positioning System
HOS	Hours of Service
HOV	High Occupancy Vehicle
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
IT	Information Technology
JSB	Job Safety Briefing
JTTF	Joint Terrorism Task Force
KPI	Key Performance Indicator
LAN	Local Area Network
LRT	Light Rail Transit
LRV	Light Rail Vehicle
MAP-21	Moving Ahead for Progress in the 21 st Century
MAS	Maximum Allowable Speed
MITP	Maintenance Inspection and Testing Procedure
MSDS	Material Safety Data Sheets
MUTCD	Manual on Uniform Traffic Control Devices
NFPA	National Fire Protection Association
NIMS	National Incident Management System
NRC	National Response Center
NSP	National Safety Plan (49 CFR Part 670)
NTD	National Transit Database
NTI	National Transportation Institute
NTSB	National Transportation Safety Board
OHA	Operating Hazard Analysis
OSFC	Operations Safety Field Committee
OSHA	Occupational Safety and Health Administration
OSSRC	Operations Safety and Security Review Committee
OST	Office of the Secretary of Transportation (USDOT)
PRT	Pittsburgh Regional Transit
PennDOT	Pennsylvania Department of Transportation
PHA	Preliminary Hazard Analysis
PM	Preventative Maintenance
PRTSRP	Pennsylvania Rail Transit Safety Review Program
PTASP	Public Transportation Agency Safety Plan
PTSCTP	Public Transportation Safety Certification Training Program
PTSP	Public Transportation Safety Program
PUC	Public Utility Commission
QA/QC	Quality Assurance/Quality Control
RFGPTS	Rail Fixed Guideway Public Transportation System
ROW	Right-of-Way
RTA	Rail Transit Agency

RTO	Rail Traffic Operations
RTSRP	Rail Transit Safety Review Program
RWP	Roadway Worker Protection
SA	Security Analysis
SCADA	Supervisory Control and Data Acquisition
SCS	Safety Certification Subcommittee
SDS	Safety Data Sheet
SERT	Safety Event Review Team
SSCRC	Safety & Security Certification Review Committee
SEPP	Security and Emergency Preparedness Plan
SHA	Sub-System Hazard Analysis
SOP	Standard Operating Procedures
SMS	Safety Management System
SPT	Safety Performance Target
SRM	Safety Risk Management
SSCS	Safety and Security Certification Subcommittee
SSI	Safety Sensitive Information
SSO	State Safety Oversight
SSOA	State Safety Oversight Agency
SSP	System Security Plan
STV	Small Transit Vehicles
SWAT	Special Weapons and Tactics
TSA	Transportation Security Administration
TSI	Transportation Safety Institute
TSSP	Transit Safety and Security Program
TTW	Train to Wayside Control System
TVA	Threat and Vulnerability Assessment
TWC	Train to Wayside Control
UHC	Unacceptable Hazardous Conditions
U.S.C.	United States Code
USDOT	United States Department of Transportation

FEDERAL REGULATIONS

49 CFR Part 625	Transit Asset Management
49 U.S.C. 4329	National Safety Plan
49 CFR Part 659	Former State Safety Oversight Rule
49 CFR Part 670	National Public Transportation Safety Program Rule
49 CFR Part 672	Public Transportation Safety Certification Training Program Rule
49 CFR Part 673	Public Transportation Agency Safety Plan Rule
49 CFR Part 674	State Safety Oversight Rule

DOCUMENT CONTROL

Version Number and Updates <i>Record the complete history of successive versions of this Public Transportation Agency Safety Plan.</i>			
Version Number	Section/Pages Affected	Reason for Change	Date Issued
#2-2022	All - reorganized	Annual Update	12/27/2022

PUBLIC TRANSPORTATION AGENCY SAFETY PLAN
PITTSBURGH REGIONAL TRANSIT

TRANSIT AGENCY INFORMATION

TRANSIT AGENCY	PITTSBURGH REGIONAL TRANSIT	Heinz 57 Center 345 Sixth Ave, Third Floor Pittsburgh, PA 15222 412-566-5500
BOARD	Jeffrey W. Letwin, Esquire	Board Chair
ACCOUNTABLE EXECUTIVE	Katharine Kelleman	Chief Executive Officer
SMS EXECUTIVE	Burton K. Jennings	Chief Safety Officer
OPERATIONAL MODES	Multimodal	Light Rail, Incline, Bus
FTA FUNDING TYPES	49 U.S.C. Chapter 53, Sections 5303, 5307, 5310, 5337 & 5339	Metropolitan Planning, Urbanized Area Formula, Enhanced Mobility for Seniors, State of Good Repair, Bus and Bus Rail Facilities

PTASP PLAN CERTIFICATION

Name of Entity That Drafted This Plan	Pittsburgh Regional Transit System Safety Department, with input and assistance from other PRT Divisions and K&J Safety and Security Consulting Services, Inc.	
Annual Review Completed By	Chief Safety Officer/Deputy Chief Safety Officer	
Signature by the Accountable Executive	Signature of Accountable Executive	Date of Signature
	Katharine Kelleman Chief Executive Officer	12/28/2022
Approval by the Board	Name of Individual/Entity That Approved This Plan	Date of Board Approval
	Jeffrey W. Letwin Pittsburgh Regional Transit Board Chair	12/28/2022
	Relevant Documentation	
	December 28, 2022, Board Resolution approving and authorization adoption and implementation of PRT's Public Transportation Agency Safety Plan, Board Assistant Secretary's Office	
Approval by PRT Safety Committee & State Safety Oversight Agency (SSOA)	Name of Entity That Approved This Plan	Date of Approval
	Operations Safety and Security Review Committee (OSSRC)	
	State Safety Oversight Agency, Division Chief	
Certification of Compliance	Name of Individual/Entity That Certified This Safety Plan	Date of Certification
	Burton K. Jennings Chief Safety Officer	12/28/2022
	Relevant Documentation (Incorporated by Reference)	
	<ol style="list-style-type: none"> 1. Security and Emergency Preparedness Plan (SEPP) - Transit Police, November 2021 (SSI) 2. Transit Asset Management Plan, V1.1, October 2019 3. Configuration Management Plan, February 20, 2018 4. Preparedness, Prevention and Contingency Plan, December 2015 5. Employee Right-To-Know and Hazardous Waste Awareness, October 2019 6. Track Inspection Standards, January 2022 7. Hours of Service Procedure 8. Fitness for Duty Policy 9. Procurement General Terms Article 7, Section 13 10. Emergency Management Plan (EMP) February 2021 (SSI) 	

PLAN REVIEW CERTIFICATION

1.0 INTRODUCTION

In 2012, the official adoption of the *Moving Ahead for Progress in the 21st Century Act* (MAP-21) took place. MAP-21 made several fundamental changes to the statutes that authorize the Federal transit programs at 49 U.S.C. Chapter 53.

FTA focuses its oversight and enforcement efforts on rail transit systems' implementation of and compliance with these requirements. FTA believes that the increased potential for catastrophic accidents, loss of life, and property damage associated with rail transit warrants immediate attention.

To advance a comprehensive approach to safety decision-making, FTA has adopted a Safety Management System (SMS) approach to developing and implementing the National Safety Program, established by MAP-21. Safety management is based on the fact that safety is not an absolute condition—there will always be hazards and risks in public transportation. However, the traditional approach of primarily reacting to accidents by prescribing measures to prevent recurrence alone will not contribute to sustaining and improving public transportation safety. The need for a new approach to addressing public transportation safety has become especially urgent in light of high-profile rail transit accidents.

Modern safety management practices that systematically and proactively identify the factors that contribute to unsafe events and prevent or minimize the likelihood and/or severity of their occurrence have proven effective in addressing similar concerns in other transportation industries. Such practices call for setting safety goals and objectives, defining clear levels of accountability and responsibility for safety, establishing proactive approaches to managing risks and hazards in the day-to-day activities, risk-based resource allocation, monitoring and evaluating performance towards goals, and continuous learning and improvement. SMS offers a means to prevent public transportation accidents by integrating safety into all aspects of a transit system's activities, including planning, design, construction, operations, and maintenance. SMS builds on the public transportation industry's three decades of experience with system safety by bringing management processes, integrated data analysis, and organizational culture more squarely into the industry's overall risk management framework. SMS is a management approach that provides processes that ensure each public transportation agency, no matter its size or service environment, has the necessary organizational structures, accountabilities, and policies and procedures in place to direct and control resources to manage safety optimally. When systematically applied, the SMS approach provides a set of decision-making tools that allow transit agencies to prioritize safety and

sound transit asset management when making informed operating and capital investment decisions.

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

SMS offers a proactive method for managing safety that enables agencies to identify and resolve safety concerns and challenges before they result in incidents or accidents. SMS combines established system safety engineering principles with advanced organizational management techniques, and supports continuous improvement in safety performance through a positive safety culture founded on four (4) key components and 10 specific elements:

- **Safety Management Policy**
 - Safety Management Policy Statement
 - Safety Accountabilities and Responsibilities
- **Safety Risk Management**
 - Safety Hazard Identification
 - Safety Risk Assessment
 - Safety Risk Mitigation
- **Safety Assurance**
 - Safety Performance Monitoring and Measurement
 - Management of Change
 - Continuous Improvement
- **Safety Promotion**
 - Safety Communication
 - Competencies and Training

Section 5329(d)(1) of Title 49, U.S.C., requires each transit agency (TA) that receives certain FTA funding to certify that it has established a comprehensive Public Transportation Agency Safety Plan (PTASP).

The PTASP is the document in which FTA requires each transit agency to detail its practice of SMS.

PRT's Public Transportation Agency Safety Plan is developed to meet or exceed the following requirements:

- Federal Transit Administration (FTA) required practices pursuant to 49 Code of Federal Regulations Part 673, Public Transportation Agency Safety Plan.
- Federal Transit Administration (FTA) requirement to set safety performance targets based on the performance measures in the National Safety Plan (NSP) pursuant to 49 Code of Federal Regulations Part 670, National Transportation Safety Plan.

- Commonwealth of Pennsylvania state safety oversight program requirements for rail transit operations known as Pennsylvania Rail Transit Safety Review Program and Standards (PRTSRP) Procedures and Standards.
- FTA Safety Directives
- FTA Special Directives
- NTSB Recommendations relevant to public transportation

These publications establish the minimum content and required elements detailed in this PTASP including, but not limited to: Safety Management System (SMS) principles and methodology, and the components of Safety Management Policy, Safety Risk Management, Safety Assurance, and Safety Promotion, as well as the various sub-components of an SMS.

- Governed by 49 CFR 673 Public Transportation Agency Safety Plan and 49 CFR Part 674 State Safety Oversight.
AND
- Not governed by the Federal Railroad Administration.

1.1 PRT's Support of Safety Management System Principles

Pittsburgh Regional Transit's Public Transportation Agency Safety Plan (PTASP) establishes the requirements for implementing PRT Safety Management System (SMS) policies and practices and supports efficient and effective achievement of Pittsburgh Regional Transit's overall safety goals and objectives. It applies to every activity of the system life cycle including operation, maintenance and support, modification and disposal, research, design, construction, test and evaluation.

PRT understands that SMS is a formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing safety risks and hazards.

Further SMS offers a proactive method for managing safety that enables agencies to identify and resolve safety concerns and challenges before they result in incidents or accidents. SMS combines established system safety engineering principles with advanced organizational management techniques and supports continuous improvement in safety performance through a positive safety culture.

All PRT Division Chiefs, Deputy Chiefs, Directors, Managers, Supervisors, Employees, and Contractors are responsible for the establishment, control, incorporation, and direction of the Safety Management System program policies and must assure that all real and potential hazards are identified and eliminated or controlled within the safety risk parameters established in the PTASP.

All PRT Division Chiefs, Deputy Chiefs, Directors, Managers, Supervisors, Employees, and Contractors must follow reporting systems and procedures established in the PTASP for investigations and disposition of all hazards and safety incidents, including potential hazards not yet involved in an incident.

The PTASP provides a basis of understanding between PRT management, employees, contractors, and oversight agencies as to how the Safety Management System program will be implemented. All PRT employees and contractors must comply with the requirements stated in the PTASP.

1.2 System Description

This section of the Public Transportation Agency Safety Plan (PTASP) provides a brief history of PRT's system, its operating environment and organizational structure. Also described are services, facilities, and equipment and basic departmental functions.

1.3 General Overview and History

Port Authority of Allegheny County was created under enabling legislation enacted by the General Assembly of the Commonwealth of Pennsylvania on April 6, 1956. This act (the Second Class Port Authority Act), as amended, assigns Port Authority the responsibility to plan, acquire, construct, maintain and operate facilities and projects for the improvement and development of the port district and mass/rapid transportation facilities for the citizens of the County. These facilities include light rail transit (LRT), bus operations, inclined planes, busways, and stations. On June 9th, 2022, Port Authority of Allegheny County officially changed its name to Pittsburgh Regional Transit (PRT).

The PRT currently operates 98 bus routes, three (3) rail routes, paratransit service and an incline with ridership as follows:

Service Mode	Ridership – CY 2021			
	Annual	Weekday	Saturday	Sunday
Bus	24,257,315	77,597	49,870	31,881
LRT	2,018,734	6,031	4,882	3,893
Paratransit	761,638	2,632	1,111	564
Incline	310,326	655	1,679	984

1.3.1 Administrative Offices

PRT's administration headquarters is located in the Heinz 57 Center at 345 Sixth Avenue in Downtown, Pittsburgh. Approximately 249 employees are located on the

third and fifth floors of the building, which is owned by Smithfield Associates, Ltd. and managed by McKnight Property Group. PRT's Customer Service Center is located at 623 Smithfield Street in downtown Pittsburgh. The building is also owned by Smithfield Associates, Ltd. and managed by McKnight Property Group.

PRT's main shop/office building at 2235 Beaver Avenue currently houses personnel engaging in functions that include: Bus/Heavy Maintenance, Human Resources, Road Operations and Information Technologies and Instruction/Operations University.

All PRT's administration and maintenance buildings comply with applicable code requirements and have various fire/life safety features that may include:

- AED's
- Panic hardware
- Fire extinguishers and alarms
- Handrails and guardrails
- CCTV Security Cameras, fences and gates
- Sprinkler systems
- Emergency exits and lighting
- Emergency communications systems
- Emergency shower
- Eyewash stations
- Chemical/paint safety

1.3.2 Facilities and Rail Maintenance Shops

PRT's Facilities Maintenance is centrally located in the City of Pittsburgh. It is comprised of four distinct buildings, yards, storage areas and parking facilities. The four buildings house approximately 250 plant maintenance staff and the material and equipment necessary to maintain PRT's physical plant. One building is dedicated to Facilities Systems and Auto Maintenance Shop. The Facilities and Rail Maintenance functions performed, directed, and dispatched from this site include the following:

- Traction and signal power system
- Structures, buildings and associated equipment
- Rail and Busway Signaling systems
- Track and roadway
- Stations and stops
- Drainage and plumbing systems
- Non-revenue vehicles
- Landscaping
- Custodial services
- Building & electrical
- Support vehicles, service, and repair

1.3.3 Light Rail Transit System

PRT's rail system was created by the consolidation of 33 private transit carriers which included the Pittsburgh Railways Company upon whose original rights of way the current system operates. Prior to 1987, the system operated trolley service along four alignments: Overbrook Line, Drake Line, Library Line and Beechview Line.

The rail system traverses the central business district and six densely developed communities located within the City of Pittsburgh (Allentown, Beechview, Beltzhoover, Bon Air, Carrick and Overbrook) and the suburban municipalities of Baldwin Township, Municipality of Bethel Park, Castle Shannon Borough, South Park Township, Municipality of Mt. Lebanon, Dormont Borough and Upper St. Clair Township.

1.3.4 Stage I LRT Program

A significant portion of the system was upgraded from trolley to light rail standards in 1987 as part of Stage I of PRT's LRT program. In 1987 Operations were suspended on the Overbrook Line, which provided service between South Hills Junction and Castle Shannon since the early 1900s, because of the extremely deteriorated condition of three bridges. Stage I included the construction of a downtown subway and the 10.5-mile line from downtown Pittsburgh to South Hills Village and the new Mt. Lebanon Tunnel. Improvements to the Library Line and Mt. Washington Tunnel, a new vehicle maintenance building and control center and procurement of 55 articulated air-conditioned LRVs were also part of the project. LRVs operate on the South Hills Village, Library and Allentown routes on lines that were upgraded to LRV standards. As of September 1999, the Drake Line was closed with the retirement of all Presidents' Conference Committee (PCC) Cars. The Drake Line was serviced only by the PCC. During 2003, improvements were made to the Drake Line that allowed for testing of the new CAF LRVs.

1.3.5 Stage II LRT Program

The Stage II LRT Program was a continuation of the work performed under the Stage I Program. The Stage II LRT Project opened in June 2004 and consisted of upgrades to the Library Line, reconstruction of the Overbrook Line with approximately 5.5 miles of double track, construction of eight (8) stations, procurement of twenty-eight (28) new LRVs, rehabilitation of 55 LRVs, upgrade and expansion of the Operations Control Center and the implementation of an integrated Central Control System with an upgraded cab signal system along the rebuilt Overbrook Line.

The Overbrook Line currently operates with a Cab Signal System.

New Stations

- Willow
- Memorial
- Killarney
- McNeilly
- South Bank (Bus/Rail)
- Denise
- Bon Air
- Boggs

Bridges Along Overbrook

- McNeilly Road
- Glenbury Road Bridge
- South Bank Flyover
- Oak Viaduct
- Reflectorville Bridge
- McKinley Park Bridge
- South Hills Junction Flyover

The project also included four new substations at Washington Junction, Slater, Glenbury and Boggs to increase overhead power on the system from 650 DC to 750 DC. Two high platform stations at Simmons and Lytle were constructed with park n' ride lots with an approximate capacity of 600 vehicles. These stations opened in 2004.

In May 2005, PRT opened the South Hills Village parking garage adjacent to the South Hills Village Station. The 7 story, 2,200 space facilities includes a dry standpipe fire system, emergency phones, exits and CCTV.

1.3.5.1 North Shore Connector

In March 2012, PRT opened the North Shore Extension that connected the North Shore, PNC Park, Heinz Field, Rivers Casino, Science Center and other attractions via twin bored tunnels under the Allegheny River. Service on the 1.2-mile extension is provided from three newly constructed stations at Gateway (between Penn and Liberty on Stanwix), North Side (adjacent PNC Park on General Robinson), and Allegheny (adjacent Heinz Field on Reedsdale). The Gateway and North Side Stations are underground subway stations and Allegheny Station is constructed on elevated track structure.

1.3.5.2 Current Rail Operations

PRT's Operations Division currently operates a light rail system consisting of three primary routes consolidated into the Red, Blue and Silver Lines and serves the

South Hills communities and the City of Pittsburgh. The system is comprised of approximately 25 route miles of track with 4 tunnels, 25 bridges, a central business district subway that opened in 1985 and the North Shore Extension that opened March 25, 2012. Approximately 27,000 patrons are served each weekday by the current system however COVID 19 drastically reduced ridership beginning in March 2020. The system is in revenue operation between approximately the hours of 4:30 am and 1:30 am (the following day) and provides service at approximately five-minute intervals during peak service demand & at twenty-minute intervals during off-peak hours.

Silver Line via Overbrook

The Silver Line – Library via Overbrook operates daily between the Library Station and the City of Pittsburgh via the Overbrook alignment.

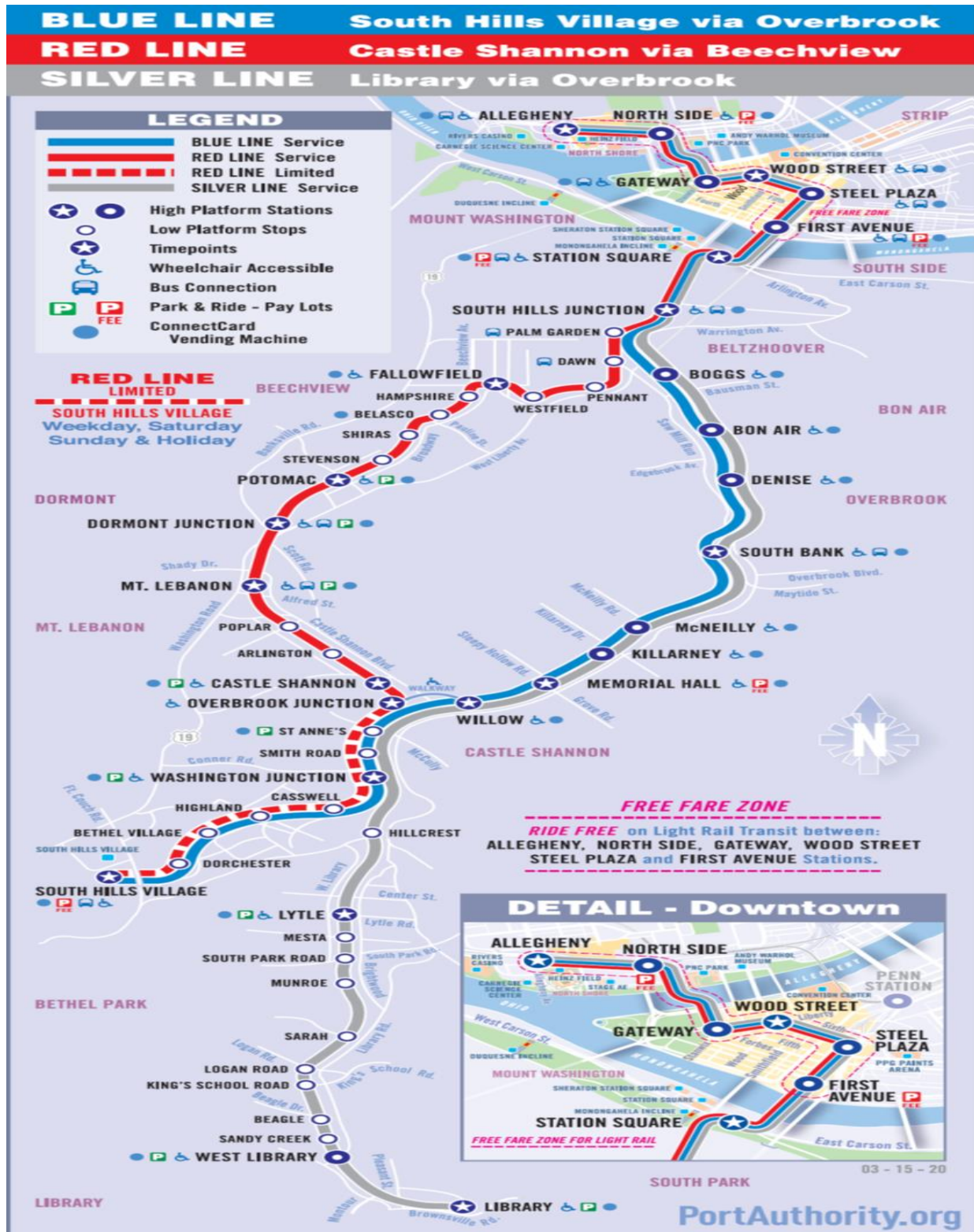
South Hills Village via Overbrook (Blue Line)

The Blue Line – South Hills Village via Overbrook operates daily between South Hills Village and the City of Pittsburgh via the Overbrook Line.

Overbrook Junction via Beechview (Red Line)

The Red Line – Overbrook Junction via Beechview operates daily between Overbrook Junction Station and the City of Pittsburgh.

Light Rail Transit System



1.3.5.3 Physical Plant

Rail transit operations are supported by vehicle and facilities maintenance shops, vehicles, inclined planes, a vehicle storage yard, a Control Center that includes Bus and Rail Traffic Operations, a traction power system, a signaling system, stations and station stops, administrative offices, storage/warehousing and public rights-of-way through the service area.

Rail Facilities

PRT's rail operations and rail vehicle maintenance facilities are located on a 63-acre site in Bethel Park and Upper St. Clair, Pennsylvania. Two buildings constructed for Light Rail Vehicle (LRV) operations house Rail Traffic Operations and the light rail vehicle maintenance functions. A yard facility capable of storing a fleet of about 90 LRVs is located between and adjacent to the two buildings. PRT facilities are designed and maintained to meet federal, state and local code requirements.

Rail Traffic Operations (RTO)

PRT rail operations are controlled and monitored on a 24-hour basis from the RTO located on the second floor of the Transportation Building. Staffed by the Director of Road Operations, Manager of Road Operations, Assistant Manager of Road Operations and Movement Directors, this unit performs control and monitoring functions using equipment that includes:

Radio Communication. The radio system provides RTO with access to all PRT channels. The movement directors communicate with rail operators, field supervisors and maintenance personnel conveying the necessary information and/or instructions to effectively maintain and restore service, assist in emergency situations and coordinate with outside agencies. As part of the North Shore Extension, a bidirectional amplifier (BDA) with 16 emergency channels was added to the project to upgrade communications in the Central Business District. The remaining subway system BDA upgrade was completed during the 2014 calendar year. All LRVs and twenty-three stations are equipped with public announcement systems.

Telephones. Telephone sets at RTO provide access to administrative telephone lines and emergency telephones. Emergency telephones providing direct communication to RTO are located in the existing subway, the North Shore alignment and tunnels (Mt. Lebanon, and Mt. Washington). During 2013 fiscal year, two ADA compliant emergency telephones were installed at each of the following six high level platforms along the Stage I Line – Washington Junction, Castle Shannon, Mt. Lebanon, Dormont Junction and Fallowfield. All

subway, North Shore, tunnel and the Panhandle Bridge emergency phones are indicated by blue lights. All station yellow emergency call boxes report directly to Transit Police Dispatch.

Computer Consoles. Four computer consoles at RTO allow Movement Directors to transmit and receive information entered into various automated systems. Track ball mouse devices are used to operate signals, electric switches, fans and other system elements remotely from RTO.

Rear Projection Overview Screen. A set of 20 rear projectors, at RTO, graphically displays the entire light rail system. Indications representing vehicle movements and locations on the system aid movement directors in monitoring the system from RTO. There are portions of the light rail system projection that do not display "live" LRV movement or position. This is due to non-signalized areas of operation such as Broadway Avenue in Beechview on the Red Line, certain sections from Palm to Station Square on the Main Line, and the entire Library Line. Four CCTV cameras are also displayed via this projection screen.

SCADA. (Supervisory Control and Data Acquisition) Provisions for various system alarms to enunciate at RTO have been provided. Alarms include equipment status alarms, smoke/fire detection alarms and intrusion detection alarms.

Yard Control. The movement director controls all train movements within yard limits, including movements to/from the mainline and the vehicle maintenance shop using the same computer terminals that operate the mainline.

The Transportation Building also houses offices for transportation administration, operations, instruction, customer service, IT and other staff as well as an operator's lounge, training/conference room, locker room and washrooms.

Rail Vehicle Maintenance Shop

The shop layout includes 10 LRV track positions for inspection and 4 LRV positions for preventive maintenance and repairs. Separate rooms and areas have been provided for certain component repairs, parts cleaning, paint booth and tools and parts storage. Washrooms, locker rooms, offices, break room, training room, conference room, parts cleaning room, stationary and portable lift equipment and a loading dock have been provided in the shop building. The shop has seven flow-through tracks including a drive-through wash track. Vehicle maintenance functions performed at the South Hills Shop include:

- Daily servicing and inspection
- Interior and exterior LRV cleaning (car wash)
- Scheduled maintenance inspection
- Minor (running or unscheduled) repairs
- Major repairs and component change-out
- Wheel truing and underbody cleaning (blowdown)
- Vehicle body repairs and painting

This facility also contains an electronics shop, farebox shop and various shop ancillary areas.

Stations and Stops

PRT's passengers' board and alight at stations and stops that are designed with high-level and/or sidewalk-level platforms, some with shelters and canopies for weather protection. Some standardized elements included in stations are lighting, system graphics, boarding and alighting procedures, fare dispensing facilities, trash receptacles and provisions for the physically-challenged (such as textured surfaces, between car barriers at high platforms, high visibility markings and other such devices) to facilitate using the system. Most stations operate without on-site staff. Stops are sidewalk-level with designated boarding/alighting areas quite similar to regular bus stops. Bus stops may include all or some of the above elements or only a sign indicating stops along primary and secondary public roadways.

Signal Systems

The LRT Signal System consists of five basic signal systems: Mainline Signaling, Grade Timed Signaling, Yard Signaling, Grade Crossing Protection, Busway Traffic Signaling and Cab Signaling. The signal systems were designed, installed and tested to meet the applicable requirements of the Signal Manual of Recommended Practices, the National Electrical Code, the National Electrical Safety Code, Manual of Uniform Traffic Control Devices and PennDOT Regulations on Traffic Signs and Signals.

Mainline Signaling

Mainline signaling consists of interlocking areas, automatic spacing signals between the interlocking areas, electrically-locked, manually-controlled crossovers and grade crossings. Train-borne equipment commonly referred to as the Train to Wayside Control System (TWC) automatically routes a train to its proper destination. Under the Stage II Signal System contract, TTW was

phased out and replaced with train to wayside control (TWC). These automatic spacing signals are arranged to provide proper spacing between and safe braking distances for trains. LRVs are equipped with automatic trip stop systems that automatically apply the brakes if the train's operator violates a red signal, or speed within a track section along the Stage I and North Shore alignment.

Yard Signaling

All yard signals and most switches are controlled from an entrance and exit type control console located in the RTO. Yard switch machines are non-trailable and dual controlled with dwarf signals associated with each machine.

Grade Crossing Protection

All at-grade crossings are protected, at a minimum, by standard railroad flashing warning signals and cross bucks. The flasher signals are actuated by the presence of a train approaching the crossing and extinguished when the train passes beyond the roadway. Gated crossings are employed at Pleasant Street (Library Line), Poplar, Grove, Linden Grove, Killarney (Overbrook Line), Potomac (Red Line) and at Donati Road crossing near South Hills Village. The crossings at Castle Shannon (Overbrook), Logan Road and South Park Road (Library Line) require the LRV to "check-in" and the system interfaces with the traffic signals for automobile traffic.

PRT Engineering, Operations, and Safety implemented a Grade Crossing Improvement Plan that began mid-2014 and the program still continues. All grade crossings being improved receive all treatments needed (signage, LED lights, etc.) for better warning to motorists and pedestrians and to bring them into compliance with the Manual for Uniform Traffic Control Devices (MUTCD).

Busway/Traffic Signals

A busway signal system has been provided to allow vehicles to safely move through areas where revenue bus and rail vehicles operate on common rights-of-way and where conflicting moves can occur. To safely control traffic through these areas, all rail and bus movements from the Dawn Stop through the Carson Street Intersection are controlled by individual traffic signal systems. Standard traffic and Light Rail Transit Signals are used at these locations.

Cab Signaling

A cab signal system is an Automatic Train Control (ATC) signal system that provides rear-end protection of train and provides the train operator with indications of maximum authorized speed (MAS) by automatically considering the location of trains and track conditions ahead. This information is transmitted by Audio Frequency coded track circuits, through the running rails, to pick-up coils mounted on the forward truck of each end of LRV. Speed enforcement is provided by the Automatic Train Protection (ATP) system on the LRV in both cab signal coded and non-cab signal coded territories when the system is activated. This system is only along the Overbrook Line.

Signal Maintenance

All signal equipment is maintained on a regular basis by trained facilities maintenance personnel in accordance with established Signal Wayside Preventive Maintenance Standards. Any signal defect reported are checked and immediately repaired.

Traction Power

The traction power distribution system consists of eleven electrical substations, four tie breaker stations at Boggs, Pine, Gateway Station and Allegheny Station, a network of cables which supplies 650 volts of direct current (nominal) to overhead wires, as well as the cabling to running rails that provides the negative return back to the substations. The rail cars use this 650-volt power to operate the traction motors and to energize all auxiliary systems. All traction power and substation feeds are monitored and controlled from panels and consoles by a remote Supervisory Control and Data Acquisition (SCADA) system located in the RTO.

Power System Maintenance

Equipment used for power distribution is frequently inspected to identify any visible defects according to preventive maintenance programs that involve performing maintenance and service at regularly scheduled intervals. The principal elements of each system include detailed inspections that allow for close monitoring of all the substations, catenary, switches, and signals. Timely corrective action and component replacement are performed when warranted based on the individual component life cycle.

Each element of the power distribution system such as passenger station lighting, subway lighting, substations, power cables, catenary, emergency fans, louvers, pumps, switches and control equipment, etc., is inspected on a regular basis and repairs to the elements are made promptly.

1.3.5.4 Rail Revenue Vehicles (LRVs)

The current rail fleet consists of twenty-eight (28) CAF, and fifty-three (53) rehabilitated Siemens for a total of eighty-three (81) LRVs.

The 28 LRVs and all rehabilitated LRVs are approximately 85 feet in length, 8.5 feet wide and 12 feet in height. The top-rated speed for this LRV is 50 MPH and has a capacity of 62 seated patrons and a “crush” load capacity of 200 passengers. All components were designed and constructed of materials meeting Federal Transit Administration requirements for safety practices. The vehicle is made secure for fire/life safety purposes by removing the pantograph from contact with the overhead current supplying wire.

Rail Car Preventive Maintenance

Prevention is the cornerstone of vehicle maintenance at PRT where a trained staff adheres to an established Preventive Maintenance (PM) program. PM means examining and monitoring equipment through programmed inspection, follow-up repairs, failure analysis and programmed component replacement. Frequent auditing of the PM program ensures that it is being carried out. Other tasks in maintaining PRT’s rail fleet include corrective maintenance, component repair and overhaul and servicing and cleaning.

Objectives of the PM program are:

- Ensure operational safety and system dependability
- Reduce service failures and resultant corrective maintenance
- Prolong equipment life
- Maximize passenger comfort and satisfaction
- Minimize system maintenance costs
- Optimize workload schedules

The PM program consists of routine tasks such as inspection, cleaning, lubrication and servicing that are scheduled and performed at specific intervals. Under the direction of a maintenance supervisor, service personnel visually inspect each vehicle’s interior and exterior as well as related subsystems in order to identify potential safety defects or abnormal conditions. Typical items checked are batteries, brake systems, seating, lighting, stanchions, destination signs, mirrors, door operation, exterior body, currency collection and HVAC equipment.

Rail Car Corrective Maintenance

Corrective maintenance restores a vehicle to service following failure to a system or component. Corrective maintenance consists of troubleshooting, repairing failed

equipment and returning the vehicle to service as quickly as possible. Minor repairs that take less than eight hours are normally classified as running repairs. Heavy repairs are of longer duration.

Corrective maintenance is addressed as a result of defects noted by rail operators and defects found during routine inspection, vehicle failure in service and accidents. In all cases, risk is assessed, and a decision made to repair immediately or log for repair during the next scheduled maintenance activity.

Vehicle problems identified during revenue operation are noted on a defect card and reported to RTO. If the problem has an immediate impact on safety or service, the rail operator, at the direction of an RTO movement director or a road operations supervisor, may attempt to resolve it. A Rail Tech may also be dispatched to the unit to troubleshoot. If the problem cannot be resolved, the vehicle may be removed from service.

Corrective Maintenance includes the following areas:

- **Running Repairs.** Running repairs include door repairs, window replacements, minor electrical problems, diagnosis of propulsion/braking failures, etc. Often, running repairs do not require removing a vehicle from revenue service and can be deferred until the vehicle is returned to the yard.
- **Heavy Repairs.** Heavy repairs require a longer period of time to complete and more complex troubleshooting. Typical heavy repairs include rewiring, suspension systems, body and collision work, sanding and painting. Heavy repairs are normally performed in a dedicated shop bay. Vehicles are usually stored temporarily in the storage yard until heavy repairs can be scheduled.
- **Fleet Campaigns.** Fleet campaigns and modifications involve changing performance characteristics or original equipment configuration for the entire fleet. For example, new vehicles may require extensive and frequent changes to propulsion and braking characteristics. Fleet campaigns also include engineering revisions for unreliable components and configuration control management, recommendations by a manufacturer and PRT's Technical Support initiate revisions due to experience.

Rail Car Component Repair and Overhaul

Approximately every two years, vehicles may be brought in for inspection and overhaul with service-ready components. Approximately every five years, vehicles may undergo a minor overhaul which includes refurbishing the interiors, repairing body damage and exterior repainting. At ten-year intervals, vehicles may undergo a major overhaul consisting of minor overhaul items plus rebuilding steps, doors and tracks, replacing interior finishes and renovating underbody structures. These

activities are extensive and may result in a vehicle being out of service for two months or more; however, the overhaul program is important to the life and reliability of the fleet. Under the Stage II Project, most of the existing fleet underwent extensive rebuilding and upgrades to configuration specifications of the new light rail vehicle. There were no new vehicles procured as part of the North Shore Extension.

Rail Car Cleaning

Complete and thorough cleaning procedures are basic to PRT's overall vehicle maintenance program. Cleaning is a vital step in detecting and correcting minor repairs, keeping the vehicles in excellent running condition, and providing a safe environment and attractive appearance for the general public. PRT's cleaning program consists of light interior cleaning performed daily, exterior washing performed daily, heavy interior cleaning performed every 30 days and underbody pressure washers and electrical blowdown performed prior to scheduled overhauls.

Air sanitization units are in the procurement process currently for the entire railcar fleet. This purification system uses UV technology along with a bi-polar ionization process to sanitize the air and surfaces in the vehicle during operation providing added cleanliness and sanitization improving safety. These units are on order and targeted for installation the fourth calendar quarter of 2022.

Track Systems

PRT's rail system employs different types of track systems, depending on the location (ballast, concrete, open deck), with rights-of-way in subway, at-grade and on aerial structures. Each system uses different materials and is maintained differently. All revenue tracks are inspected on a frequent schedule; non-revenue and yard tracks are also inspected, but on a less frequent schedule.

1.3.6 Bus Operations

The Bus Operations section of the Operations Division represents the largest of the transportation services provided by PRT. PRT currently operates 98 fixed bus routes in an integrated system throughout Allegheny County that link residential areas with work sites, downtown Pittsburgh, hospitals and shopping malls. The bus routes originate from four bus garages located in the following communities: Ross Township, Collier Township, West Mifflin Borough and Pittsburgh (East Liberty area). Many of the bus routes operate seven days a week with 3- to 90-minute headways depending on the time and day with reduced weekend service. Major bus repairs and component rebuilding are performed at PRT's main bus shop facility located at 2235 Beaver Avenue, Pittsburgh (Manchester), Pennsylvania.

1.3.6.1 Revenue Buses

PRT has a fleet of approximately 723 revenue buses of various makes and models. The fleet consists of (30) 35-foot buses, (567) 40-foot clean diesel buses, (126) articulated buses, and (26) Gillig Low Floor Hybrid buses with six (6) 40-foot electric buses added for pilot testing and service in 2021 and are now in regular service throughout the County.

Bus operations are supported by vehicle and facilities maintenance shops, vehicles, bus storage yards, garages, a Bus Traffic Operations (BTO) Center, stations and stops, busways, bus lanes, HOV lanes, administrative offices, storage/warehousing and public rights-of-way through the service area.

1.3.6.2 Bus Facilities

PRT's bus service is supported by a control center (BTO), operating facilities, a major bus repair facility, vehicles, bus stops and passenger transfer centers, administrative offices, storage/warehousing, busways and public rights-of way.

Bus Traffic Operations (BTO) Control Center

Bus operations are monitored and coordinated on a 24-hour basis from the BTO located in the Transportation Building at the South Hills Village location. Staffed with Bus Traffic Dispatchers and Area Supervisors, this unit performs the monitoring and coordinating functions using radio communication and telephones to link communication between internal PRT units, Transit Police dispatch and external service providers such as police, fire, and emergency medical service personnel.

Bus Operating Facilities

There are four bus operating facilities or divisions in PRT's bus system. All four bus-operating facilities operate 24 hours per day, 7 days per week, and 365 days per year. The operating facilities from which all PRT's buses are dispatched are as follows:

- Ross facility
- Collier facility
- West Mifflin facility
- East Liberty facility

Transportation and maintenance functions are performed at these facilities. PRT bus facilities were designed and are maintained to meet federal, state and local requirements including fire codes.

Combined, the garages and shops at the four bus facility sites currently store and maintain about 723 buses of various makes and models. The shops were designed for the performance of vehicle inspections, minor or running repairs and interior and exterior vehicle cleaning.

Vehicle fueling at the operating sites consists of fueling islands equipped for diesel and gasoline.

Vehicle cleaning facilities at the operating sites consist of automatic bus washers, heavy cleaning areas and pits for underbody cleaning. The bus washers include equipment for the control, treatment, and recirculation of water. Routine interior vehicle cleaning is done in the storage yard. Heavy interior cleaning requires a thorough cleaning of the vehicle floors, walls and mats; these activities take place in the shop. Undercarriages of revenue vehicles are cleaned prior to scheduled maintenance inspections.

All four PRT bus operations facilities include offices for transportation and maintenance administration, instruction/training, training/conference rooms, drivers' lounges, locker rooms and restrooms.

Bus Preventive Maintenance

Preventive maintenance practices are monitored daily. Operational safety, improved vehicle reliability, increased miles between road failures; increased equipment life and maximum passenger comfort are objectives of the preventive maintenance programs. Maintenance Managers lead initiatives in the field.

The intent is to retain vehicles in a condition compatible with safety, dependability, and appearance standards. Well-designed preventive maintenance procedures – and enforcement of these procedures – ensure the effectiveness of these maintenance programs.

The preventive maintenance programs attempt to identify problem areas before they require corrective maintenance. Therefore, reporting requirements are developed for each inspection procedure to support future preventive maintenance activities as well as effectively communicate the specific need for corrective maintenance. The flow of information between preventive and corrective maintenance activities is critical to the success of both types of maintenance. Records of all preventive actions are maintained at each bus location.

The preventive maintenance programs include the following:

- **Inspection.** All buses are subjected to a periodic inspection program to

determine if conditions exist that require a maintenance action. The level and frequency of inspections are consistent with OEM and supplier recommendations, state inspection standards, industry standards, criticality of the equipment, probability of finding a defect and operational experience.

- **Servicing.** Servicing consists of regularly scheduled activities that are necessary to maintain the performance of the vehicle and its components. These activities include lubrication and adjustments, but they also may involve the replacement of consumables such as air filters. Servicing schedules are normally provided by equipment manufacturers in their maintenance manuals.
- **Cleaning.** All active buses receive daily exterior washing and interior housekeeping. Interior cleaning and sanitizing efforts have increased greatly with the COVID 19 pandemic.

The Preventive Maintenance procedures require that buses undergo a general inspection every 6,000 miles. In addition, guidelines are provided for supplemental inspections of specific sub-components. The Managers of Maintenance are ultimately responsible for ensuring that the required inspections and repairs are conducted according to schedules and that all necessary repairs are made and documented for review by local, state and federal officials.

Bus Corrective Maintenance

Bus Corrective Maintenance is performed by both Bus Maintenance and Main Shop Departments. These two departments work together to ensure that corrective measures are consistently implemented throughout the system and for the respective fleets. Corrective measures are monitored for completion and analyzed for follow-up.

Operators noting safety related (CDL) defects on buses in the yard must report such defects to Bus Maintenance. These defects must be corrected by maintenance personnel prior to pull-out. See Bus pre-trip inspection card for more info.

Operators are also required to notify BTO whenever a safety-related equipment defect is noted subsequent to pull-out. Bus Maintenance & Service has on-street emergency repair and vehicle retrieval capabilities.

Bus Servicing and Cleaning

Bus servicing and cleaning is performed by the Bus Maintenance under the direction of the COO-Maintenance. Daily servicing, cleaning, and fueling of vehicles is performed at all bus locations. Safety, reliability, cleanliness, and customer satisfaction are objectives of the servicing/cleaning functions. In addition to the daily servicing/cleaning of vehicles, regularly scheduled extensive cleaning is also

performed on the buses.

Nightly, every bus receives an exterior wash. In addition, seats, floors, windows, and the operator's compartment are swept, trash removed, and any major spills cleaned up. Floors are cleaned and all high-touch surfaces are wiped down and sanitized.

Air sanitization units are currently in the installation process for the entire fleet. This purification system uses UV technology along with a bi-polar ionization process to sanitize the air and surfaces in the vehicle during operation.

PRT has established a goal of performing interior washings on its bus fleet within a 30-day interval. Reports are generated and distributed to service personnel who indicate the days between the last interior washing for every bus assigned to a particular location. Buses are scheduled for interior washings from the report.

1.3.6.3 Busways

PRT also operates three (3) busways as part of its motor bus operation: The South Busway, the Martin Luther King, Jr. East Busway (also referred to as the East Busway) and the West Busway. All Busways are subject to PRTSRP oversight. Authorized access to the busways can only be granted by PRT and is generally limited beyond PRT's buses and vehicles to law enforcement and emergency management and response functions.

South Busway

The South Busway, which opened in 1977, is a 3.8-mile, two-lane concrete roadway between Glenbury Avenue in the city's Overbrook neighborhood and Carson Street at Station Square. Buses formerly shared this busway with light rail vehicles between the Dawn and South Hills Junction transit stops. Access is available for non-rail vehicles at Glenbury Avenue, Pioneer Avenue, West Liberty Avenue, Warrington Avenue (Palm Garden), Haberman Avenue and the Mount Washington Transit Tunnel to Station Square. As part of the Stage II Overbrook Project, the South Busway from Glenbury to Whited was upgraded and opened for service in September 2002. Upgrades consisted of new roadway alignment, which is now grade separated from rail, new stations, lighting and signage.

Martin Luther King, Jr. East Busway

The Martin Luther King, Jr. East Busway which opened in 1983 is a 6.8-mile two-lane concrete roadway between Hay Street in Wilkinsburg and Grant Street in the City's Downtown. Access is available at Hay Street, Wallace Avenue, Fifth Avenue (East Liberty neighborhood), Neville Avenue, 26th Street and Grant Street, serving

(6) stations. The East Busway Extension, which opened June 15, 2003, is a 2.3-mile extension from the original Hay Street terminus, east to Swissvale. The extension consists of (3) stations (Hamnett, Roslyn, Swissvale), relocated Wilkinsburg Station with 577 space park n' ride and park n' ride lots at Hamnett (100 spaces) and Swissvale (126 spaces). Two additional access points to include Vernon Avenue to Swissvale Station and Kenmawr ramp via South Braddock Avenue.

West Busway

The West Busway, which opened in September 2000, is a 5.1-mile two-lane concrete roadway that provides exclusive right-of-way between the Borough of Carnegie and Downtown Pittsburgh via West Carson Street. Interchanges with the Parkway West (I-279) and West Carson Street provide service to the Airport Corridor and serve six (6) stations and approximately 1533 new park and ride spaces. Seven access points onto the busway include West Carson Street, Chartiers Avenue via Sheraden Ramp, Ingram Avenue Ramp, Bedford Avenue Ramp, Chartiers Avenue Ramp, I-376 Eastbound Ramp and Campbells Run Road.

Wabash High Occupancy Vehicle (HOV) Tunnel

In December of 2004, the PRT completed construction and opened the Wabash High Occupancy Vehicle (HOV) Tunnel and parking facility. The Wabash HOV Facility links Route 51, via Woodruff Street, with Carson Street across from Station Square. The 3,650-foot tunnel is equipped with CCTV, emergency phones, and fans and is designated HOV-2 during peak operating hours. The Wabash Facility is not a regular scheduled route for PRT buses but may be used for special events and/or emergencies. The Facility is owned by PRT and monitored by the Transit Police and maintained by the Way and Facilities Departments.

Busway Signaling

A busway signal system has been provided to allow vehicles to safely move through areas where revenue bus and rail vehicles operate on common rights-of-way and where conflicting moves can occur. To safely control traffic through these areas, all rail and bus movements from the Dawn Stop through the Carson

Street intersections are controlled by individual traffic signal systems at each of the following intersections:

- West Liberty Avenue Ramp (Dawn Stop)
- Warrington Avenue Ramp (Palm Garden)
- Service Road (Building #4)
- Re-merge area

- Haberman Avenue Ramp (South Hills Junction)
- Carson Street Ramp

Each of the intersections was designed so that traffic flow from the main routes is not interrupted until a secondary route vehicle requests access to the system. This system has a supervisory control machine located in the South Hills Junction Tower.

1.3.7 Inclined Planes

The PRT owns and directly operates the Monongahela Incline. The inclines are regulated as elevators through the Pennsylvania Department of Labor and Industry and the Mon Incline (operated by PRT) is included in the PRTSRP State Safety Oversight Program for regulatory oversight; hence, only the Monongahela Incline is included within this PTASP as part of the Federal Fixed Guideway regulations. The Mon Incline is staffed and operated by Rail Service Delivery and maintained by the Facilities dept with support from Power and Signals and Way dept for certain specific tasks.

PRT owns and leases out the operation of the Duquesne Incline to the Society for the Preservation of the Duquesne Incline. PennDOT provided PRT with a letter dated November 22, 2019, stating that *"the Federal Transit Administration and the RTSRP have determined that the Duquesne Incline Plane is not subject to state safety oversight (SSO) requirements and will be removed from the safety and security oversight program, effective immediately"*.

1.3.8 Access for Paratransit System

ACCESS is operated by five (5) for-profit and one (1) non-profit carrier under management by Transdev Services, Inc. d/b/a ACCESS Transportation Systems. The ACCESS Program provides advance reservation, shared-ride door-to-door service throughout Allegheny County using approximately 340 vehicles. The service is open to the general public but there are reduced rates for older persons, people with disabilities and clients of human service agencies. ACCESS Transportation Systems and its subcontractor carriers are required to maintain their own safety plans (included in PRT boiler plate requirements Article 7, Section 13 of contract specification language – incorporated by reference). PRT does not utilize contractors to provide any revenue service

1.4 Weather

Pittsburgh and Allegheny County lie within the Northern temperate climate zone, experiencing a relatively wide range of temperatures over the course of the year. The Average temperature for the Pittsburgh, Pennsylvania area is included in Appendix F.

2.0 SAFETY MANAGEMENT POLICY

As required by 49 CFR Part 673.23, Section 2 of the Public Transportation Agency Safety Plan (PTASP) of the Pittsburgh Regional Transit provides its Safety Management System Policy Statement signed by the agency's Accountable Executive / Chief Executive Officer that endorses the safety management system (SMS) program and describes the authority that establishes the PTASP. Section 2 discusses the scope and purpose of the PTASP. Section 2 provides a clear definition of the authority, goals and objectives for the safety management system program and stated employee and contractor responsibilities to ensure they are achieved. Appendix A provides a list of definitions of important terms used in the PTASP. The Safety Management Policy is distributed and communicated to PRT employees through the Crossroads internal network and location bulletin boards, during new-hire orientation and safety committee meetings and on Division Information Messaging Monitors (DIMM).

2.1 PRT Safety Management System Policy Statement

It is the mission and policy of the Pittsburgh Regional Transit (PRT) to provide safe and reliable transportation service for the general public, to provide safe and healthful working conditions for Pittsburgh Regional Transit employees, and to comply with all applicable laws and regulations.

PRT is fully committed to a Safety Management System (SMS) and to providing its customers with safe service, and to maintain a strong safety culture and working environment that ensures the safety and health of its employees and protects the environment.

The management of safety is a major consideration in every stage of all PRT activities. PRT is committed to implementing, maintaining and continually improving processes to ensure that all its operational and maintenance activities are supported by reasonable and appropriate allocation of organizational resources and aimed at achieving the highest level of transit safety performance.

All employees, contractors, and consultants are responsible and accountable for the delivery of this highest level of safety performance, starting with PRT Board approval of this Safety Management Policy Statement, PRT's Public Transit Agency Safety Plan (PTASP) and designation of PRT's Chief Executive Officer (CEO) as the agency's designated Accountable Executive.

PRT's commitment is to:

- Support its SMS by providing appropriate resources to support an organizational culture that fosters safe operational practices, encourages effective safety

reporting and communication, and actively manages safety with the same attention to results as that given to the other critical management systems of PRT.

To implement PRT's Public Transportation Agency Safety Plan, PRT's employees, contractors, and consultants must focus on the following Safety Management System components:

- PRT's Safety Management Policy Statement;
- PRT's Safety Risk Management process for identifying hazards and analyzing, assessing, and mitigating safety risk to the lowest reasonable level;
- Safety Assurance to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that PRT meets or exceeds its safety objectives through the collection, analysis, assessment, and trending of information; and
- Safety Promotion to support SMS as applied to PRT, including internal and external safety communications and management and employee training.

PRT's CEO (Accountable Executive) has appointed the Chief Safety Officer as the agency's designated SMS Executive, with primary responsibility for maintaining and updating PRT's PTASP on an ongoing basis. All PRT employees, contractors and consultants are responsible for working safely and assuring that PRT's service is delivered safely for all who come in contact with it.

This PTASP has been updated to reflect changes in the PRTSRP Procedures & Standards, July 2022 revision.

2.2 Scope and Purpose of Public Transportation Agency Safety Plan

2.2.1 Scope

Because it is the mission of Pittsburgh Regional Transit's management to provide a safe, reliable transportation system that offers quality customer service in a cost-effective manner, this PTASP is intended to cover all current and future PRT operations, services, and projects. In order to implement PRT's safety policies, goals, and objectives, this PTASP:

- Appoints the Chief Safety Officer as the SMS Executive;
- Addresses all PRT departments and contractors;
- Applies to all activities which involve planning, design, construction, procurement, installation, and testing of equipment or facilities, operations, maintenance, support activities, and the environment in which the transit system operates, including areas of public access and adjacent property;
- Charges each officer, Division Chief, director, manager, supervisor, and employee with responsibility for the PTASP implementation, continual improvement, and success;

- Requires coordination, integration, communication, and cooperation among all officers, Division Chief, directors, managers, supervisors, departments, and employees:
- Encompasses all rail and bus facilities, equipment, vehicles, and employee activities and applies to all who come in contact with the rail and bus systems; and
- Includes interfaces with local, state, and federal governmental entities, regulatory agencies and departments, professional organizations, and the general public.

2.2.2 Purpose

This PTASP establishes the technical and managerial safety management program adopted by PRT for the light rail transit, bus and Incline service it provides in the County of Allegheny. The PTASP describes PRT's service philosophy, organization, operations, management, and safety management system program elements.

The PTASP further identifies PRT's safety management policy and the responsibilities associated with safety management at all levels of the organization and for all entities or individuals under contract to PRT. The safety management system program formalized by this PTASP applies to every phase in the life cycle of PRT's projects and transit system itself. These life cycle phases are commonly referred to as design, procurement, construction, operation, maintenance, and disposal.

The PTASP introduces safety policies and processes where they are necessary to achieve satisfactory safety risk management, safety assurance, and safety promotion throughout the agency. PRT continually reviews and evaluates the organization and its plans, policies, directives, bulletins, and initiatives to promote safety and improve the quality of its safety management process. Accordingly, the PTASP is reviewed annually to ensure that all PRT systems, equipment, facilities, plans, procedures, manuals, and training programs are continually monitored and reviewed for compliance with established safety requirements. Specifically, the PTASP:

- Establishes the SMS program on a company-wide basis.
- Provides a framework for implementing the SMS policy and achieving safety goals and objectives.
- Identifies the relationships and responsibilities of each PRT department relative to achieving safety goals and objectives.
- Enhances employee safety reporting.
- Identifies the relationships and responsibilities of PRT with municipal, county, and state governing bodies and other organizations and agencies that impact transit safety management.
- Provides a mechanism whereby PRT can demonstrate its commitment to safety.

- Ensures that, as appropriate, contractors and suppliers meet PRT's safety requirements prior to commencing work and/or while on the premises.
- Satisfies federal, state, and local requirements.
- Ensures that the system meets or exceeds accepted industry standards and practices.
- Safety performance is continuously monitoring and improved upon.

2.3 Annual Assessment

The PTASP is intended to be a continuously improving document. To remain viable, the PTASP must be adjusted to reflect changes in PRT's organization, procedures, equipment, facilities, and operating environment.

The CSO, as the SMS Executive, will oversee the updating of the PTASP. The CSO will coordinate the annual review and changes necessary to maintain and update the PTASP document. The CSO may request assistance of staff to obtain documents and information to maintain and update the PTASP.

The Chief of Police is responsible for maintaining and updating the PRT Security and Emergency Preparedness Plan (SEPP). The SEPP is classified as a Sensitive Security Document.

Revisions to the PTASP will be necessary as influenced by developments throughout the business cycle of PRT. The PTASP will be reviewed *annually* and *updated as needed*. Changes in safety policy, goals, or objectives require the approval of the Chief Executive Officer and review of the RTSRP. The PTASP will be updated following the annual review and include the following actions areas the PRT:

- Policy changes (mission, goals, or objectives)
- Organizational changes
- Changes to rules and regulations
- Changes in operating procedures
- Elimination of equipment or addition of new equipment
- Elimination of a facility or addition/acquisition of a new facility

Changes in policy, organization, rules, regulations, or operations necessitating PTASP adjustments will be accomplished within the time limit prescribed in the Plan Revision Schedule.

2.4 RTSRP Requirements

2.4.1 Submittal Procedure

The RTSRP will submit the Procedures and Standards document to PRT on or before May 15th of each year. Transit agencies covered under the RTSRP must update their Public Transportation Agency Safety Plans and Security & Emergency Preparedness Plans and submit them to RTSRP for review and approval on or before July 31st. In the event that RTAs are provided the *Procedures and Standards* after May 15, they have no fewer than 60 calendar days following receipt of the *Procedures and Standards* to submit their updated PTASP.

The PRT must submit to the RTSRP any PTASP or SEPP revisions made between annual updates in a version as requested by the RTSRP (word, PDF, etc.). RTA revisions to the PTASP should be clearly identified for RTSRP's review (i.e., track changes). Such submissions must be made a minimum of 30 calendar days prior to the time the revision is to be implemented.

The RTSRP will make appropriate arrangements with the PRT to guard confidential and sensitive security documents. The method for transmission of SEPPs and other potentially safety sensitive documents will be arranged in accordance with PRT confidentiality requirements.

2.4.2 Review and Approval Procedure

The RTSRP will review revised PTASPs to ensure that they comply with the RTSRP's standards for such plans. The RTSRP will complete this review within thirty (30) days of receipt of the plan and either approve the plan or provide questions and comments to the PRT for further review. RTSRP will notify the PRT if additional time is needed to complete the review. If a PRT plan complies with the standard, the RTSRP will issue a written approval of the plan and will request that the PRT send a final copy of the plan with appropriate approval signatures and other endorsements as needed. The plan the RTSRP reviews and approves will be considered the PTASP in effect until another such plan is submitted and approved in accordance with this procedure.

If the RTSRP determines that the submitted PTASP does not meet FTA requirements, it will send a written rejection of the plan, along with a description of what changes are necessary to gain approval. The PRT will have 30 days to make such changes, unless otherwise specified in the RTSRP's rejection. The RTSRP will meet with the PRT to discuss the RTSRP's review of the PTASP if the PRT wishes. In the event the PRT objects to a noted deficiency or requested change from RTSRP, it shall provide written notice of its objections, and suggest alternatives within 5 days. The RTSRP and the PRT shall review the objections and suggested alternatives and agree to an

appropriate course of action within 15 days. This review process may include a meeting of the RTSRP and the PRT to clarify any deficiencies or issues.

Whether the plan is approved or rejected, the RTSRP will send the PRT a copy of the completed checklist used to review the PTASP. The RTSRP will also transmit to the PRT any additional information that the RTSRP believes would be helpful in improving the PTASP. This may include information about transit industry standards or practices, requirements of other agencies (e.g., the American Public Transportation Association), etc. Still, the RTSRP's checklists, based on its published standard, will be the only standard used for approval or rejection. Additional information from other agencies or the transit industry will be by way of suggestion or information only.

Plans shall be transmitted to RTSRP in a format agreed to by the RTSRP and the PRT (electronic or hard copy). Once a plan has been approved by RTSRP and the PRT, the PRT must submit a copy to the RTSRP in an unalterable format (electronic or hard copy) with all required (PRT) approval signatures visible.

2.5 PRT Internal PTASP Review and Approval Process

It is the responsibility of the Chief Safety Officer to ensure that the PTASP is developed, implemented, and maintained in an appropriate and effective manner. The OSSRC will review and approve the yearly updates to the PTASP prior to receiving Board Approval. The Chief Safety Officer will also notify the RTSRP staff in writing of any proposed changes to the PTASP, submitted as a draft, for their review and approval as appropriate prior to making changes.

2.5.1 PTASP Revisions

The process for revising the PTASP includes:

- A thorough review of the current PTASP by PRT's management
- Complete documentation of all proposed revisions to the PTASP
- OSSRC's review and approve of yearly update or other proposed revisions
- Required approval
- Notification of RTSRP of proposed changes/approval
- Distribution
- Implementation/Training

Updates due to changes in facilities or equipment will be accomplished by the Chief Safety Officer using change pages.

2.5.2 PTASP Revision Schedule

Table 1 - PTASP Revision Schedule Table

Plan Revision Schedule (approximate annual target dates)		
<i>Schedule Element</i>	<i>Target Completion Date</i>	<i>Responsibility</i>
Revised PTASP Revisions Completed	July 2023	Chief Safety Officer
Obtain RTSRP Approval of Revised PTASP	August 2023	Chief Safety Officer
Required Signatures Obtained	September 2023	Chief Safety Officer
PTASP Published electronically on Crossroads	September 2023	Chief Safety Officer
PTASP Manuals Printed and Distributed upon request	September 2023	Chief Safety Officer /Administration
Revised PTASP Implemented	Continuous	Directors, Chief Officers, and Managers
Initial Assessment of Revised Plan and Recommendations for Changes	Ongoing	PRT Management and RTSRP

Target completion dates for carrying out all safety-related activities in accordance with the requirements of this PTASP will be determined by the Chief Safety Officer and the OSSRC with approval by the Chief Executive Officer and Pittsburgh Regional Transit's Board, when required.

2.5.3 Implementing PTASP Revisions

Implementation of the PTASP by all PRT departments and firms participating in PRT projects will assure that safety is an integral part of all planning, testing, operation, maintenance, construction, procurement, and disposal activities. Safety continuity will be assured through the evolution of the PTASP, periodic updates of the PTASP, and audits and reviews. All PRT Division Chiefs, directors and managers are responsible for carrying out the PTASP procedures pertaining to their respective departments.

PRT has adopted a multi-step process for implementing revisions of the PTASP:

- Renew commitment of top management in the SMS/PTASP concept.
- Fully approved significant changes to policies and procedures will be distributed to and reviewed by the PRT Senior Team.
- Upon PRT Board approval the PRT Senior Team, within 60 days of Board approval of the PTASP, will transmit to their respective team(s) any relevant items for implementation and compliance.
- Senior Team members will evaluate appropriate staff and schedule requirements for implementation of any items relevant to their Divisions.
- Chief Safety Officer will coordinate cooperation from all departments.

This document, dated December 2022, is the second version of the Public Transportation Agency Safety Plan (PTASP).

2.6 Goals and Objectives

2.6.1 Goals

The ultimate goal of PRT's SMS is to ensure that it has an inclusive and effective process to direct resources to optimally manage safety risk.

PRT has established three SMS program goals to assist in optimally managing its safety risk, all of which are continual long-term (i.e., will have broad and continuing relevance throughout the life of the transit system), qualitative (i.e., not meaningless, but identifying desired results), and realizable (i.e., in some real sense, attainable):

Table 2 - SMS Program Goals

No.	Goal	Responsibility for Monitoring
1	Identify, prioritize, and respond to real and potential hazards of the transit system and impose management controls and design requirements to prevent mishaps either by eliminating hazards or reducing the associated risk to an agreed upon acceptable level, thus providing the safest practicable transit service to the public. Encourage all employees to report safety concerns. Promote safety with passengers and the community at-large.	CEO, all PRT Officers, Directors, Managers, Supervisors, Front Line Employees, and Contractors.
2	Safety will be an integral part of current and future design, procurement, construction, testing, training, operation, and maintenance of PRT's system.	All PRT Officers, Directors, Managers, and Supervisors working through the Operations and Safety &

No.	Goal	Responsibility for Monitoring
		Security Review Committee
3	PRT's operations including the working environment at all PRT facilities will meet or exceed all applicable local, state, and federal safety-related codes, ordinances, and regulations.	Chief Operating Officers, Deputy Chief Operating Officers – Transportation and Maintenance

2.6.2 Objectives

Whereas goals are general statements of ultimate end results, objectives state specifically the manner in which goals will be met. To attain its safety management program goals, PRT has set nine safety-related objectives. All listed objectives are relevant, widely applicable, and measurable.

Table 3 – Safety Related Objectives

No.	Objectives	Associated Tasks to Achieve
1	Prevent accidents that result in injuries or fatalities among passengers or other members of general public (e.g., reducing accident rates per revenue vehicle-miles).	Continually review operating rules and procedure adherence checks performed by Road Operations. SERT to provide data & recommendations to COO and CEO, for all modes.
2	Reduce incidence, frequency, and severity of on-the-job injuries to PRT employees (e.g., hours [days] lost per total hours [days] worked annually).	Trend, monitor, and act upon Safety and Claims Statistics, as well as PRT Safety Performance measures striving for continual improvement through the OSSRC, with systemwide safety communication.
3	Prevent employment-related disabilities and fatalities (e.g., number of incidents annually).	In addition to scheduled Facility PM's, System Safety routinely conducts inspections of all PRT facilities and equipment and reports findings promptly for corrective action as necessary. Corrective Actions are monitored and tracked through completion.
4	Reduce the rate of accidents/incidents that result in damage to PRT and public property and equipment (e.g., average number of	SOP and Rules Committee meets as needed or to review, evaluate, and update operating rules and procedures. Safety Event Review Team to assist with incident prevention / reduction and

No.	Objectives	Associated Tasks to Achieve
	accidents/incidents per specified number of revenue vehicle-miles).	provide data & recommendations, for all modes, as well as PRT Safety Performance measure data and trends to the COO and CEO.
5	Reduce claim, replacement, and repair costs associated with accidents/incidents that result in damage to PRT and public property and equipment (e.g., average cost per accident/incident).	System Safety, Operations and Claims to review and evaluate accident reports, including major accident reports from other systems and review with OSSRC members.
6	Ensure safety critical systems are inspected/tested and serviced on scheduled, periodic basis.	System Safety to perform internal audits of critical maintenance inspection records and procedures annually. Reports and tracks findings and recommendations.
7	Ensure effectiveness of all operation and maintenance training programs.	Rail/Bus Service Delivery and instruction to review and update/revise training programs as required.
8	Ensure effective coordination in emergencies.	Rail/Bus Service Delivery and System Safety to maintain regular communications with Transit Police and local government fire and rescue agencies.
9	Provide appropriate data and reports on performance, non-critical system failures, and accidents for use by involved departments and managers.	System Safety and Claims will report PRT safety and claims statistics on a routine basis. Safety Communications are ongoing, monthly safety performance report.

An effective PTASP benefits employees, management, and patrons. Safety Management benefits patrons/passengers directly by reducing harmful and potentially harmful incidents.

Indirect benefits to riders include improved service (e.g., through more reliable equipment). The most obvious advantage to employees is fewer harmful and potentially harmful incidents. For managers, reduced staff and equipment casualties translate, respectively, to improved safety management, productivity and system availability.

2.7 Safety Accountabilities, Responsibilities and Functions

The safety related functions of all PRT management are further delineated below. All management is responsible for a coordinated effort in fulfilling the scope and purpose of the PTASP as noted in section 2.2.

It is the responsibility of PRT's Division Chief's, Directors, Managers and Supervisors to ensure that their employees receive orientation as to on-the-job safety, hazards (real and potential), issues, policies, procedures, adequate training, constant reinforcement and emphasizing safety-awareness. This should also be a primary review component in performance evaluations. Key staff in developing and implementing SMS are as follows:

Table 4 – Key Staff

MODE	TITLE (and # if more than one person)	DEPARTMENT
Light Rail (LR)	Director of Service Delivery	RSD
	Asst. to Director of Service Delivery	RSD
	Manager of Railcar Maintenance	RCM
	Asst. Manager of Railcar Maintenance (2)	RCM
	Manager of Track & Way	RSD
	Manager of LRT Systems and Power	RSD
	Manager of Facilities	RSD - OPS
	Manager of Bus/LRT Electronics/Communications	RSD
Motor Bus (MB)	Director of Service Delivery (4)	Bus Operations
	Asst. to Director of Service Delivery (4)	Bus Operations
	Managers of Maintenance & Service, Main Shop, Non-Revenue Vehicles (6)	Bus Operations
LR/MB	Chief Operating Officers (2)	OPS
	Deputy Chief Operating Officers (2)	OPS
	All Safety Staff	L&CS
	Chief of Transit Police	L&CS
	Director of Claims	L&CS
	Dir. of Engineering/Tech Support (2)	P&Engr.
	Managers of Engineering/Tech Support (4)	P&Engr.
	Director of Maintenance Training	OPS
	Director of Road Operations	OPS
	Manager of Road Operations	OPS

Key departments are expected to provide an SMS liaison(s) who coordinate SMS related activities with the PRT System Safety Department. These liaisons, also known as Key staff (and shown above in the table, must fulfill the following: 1) complete the TSI SMS

Awareness online training, 2) complete PRT's one day SMS training, 3) complete RTSRP 101 class, 4) develop and manage safety roles within their respective departments 5) manage and measure, trend and analyze safety risk associated with their respective department operations and processes by using PRT's Safety Risk Management process 6) encourage safety hazard reporting by all employees and contractors.

Other specific safety responsibilities are listed below, and additional Division and Department organizational information can be found on PRT's intranet site, Crossroads.

2.7.1 Chief Executive Officer

The PRT Chief Executive Officer (CEO) directs allocation of available resources as necessary to meet safety goals and objectives, monitors and evaluates safety programs, and is responsible for addressing identified deficiencies. In addition, the CEO implements PRT's safety policy and, provides policy direction to departments while advising in the development of strategies for continuous improvements and for resolution of major problems.

The CEO, as the SMS Accountable Executive, fully endorses the PRT Safety Management System Program and Public Transportation Agency Safety Plan (PTASP). The CEO understands the responsibility to ensure that the PRT PTASP is certified annually as required.

PRT Executives reporting directly to the CEO include the Chief Legal Officer, Chief Operating Officer(s), Chief Development Officer, Chief Strategy Officer, Chief Information Officer, Chief Communications Officer and Chief Human Resources Officer. The Chief Safety Officer, as the appointed SMS Executive Manager, also maintains a direct reporting line to the Chief Executive Officer for all critical safety matters and a dotted line day-to-day reporting relationship to the Chief Legal Officer for general administrative and Department management functions. The Chief Executive Officer and the Chief Safety Officer meet on a scheduled quarterly basis in one-on-one meetings to discuss relevant companywide safety topics. These may include the Agency Safety Plan, SMS implementation and status of corrective actions of concern. The CSO may meet with or otherwise communicate with the CEO at any other time as deemed necessary by the CSO to ensure the CEO's direct knowledge and input on critical hazards and other safety issues. The CEO directs the plans to address these critical hazards and safety issues of PRT. Safety activities and responsibilities of these executives and their supporting staffs are as indicated, including encouraging employees to report safety concerns and promoting general safety with passengers and the community at-large.

2.7.2 Chief Legal Officer

The Chief Legal Officer responsibilities and activities include:

- Assisting the CEO and CSO in planning and delivery of safe and secure public transportation services.
- Representing the CEO at key meetings and serving as an internal problem solver on major issues, providing policy direction and oversight to special projects.
- Providing direct oversight of Claims, Internal Audit, Legal and Transit Police and Security Department. Providing day-to-day oversight of Safety Department for general administrative and Department management functions.

Direct reports to the Chief Legal Officer include the Chief of Police, Director of Claims, Director of Legal and Consulting Services and the Director of Internal Audit. As noted above, the Chief Safety Officer also has a dotted line day-to-day reporting relationship to the Chief Legal Officer for general administrative and Department management functions.

2.7.2.1 Director of Claims Department

The Director of Claims reports to the Chief Legal Officer. The Claims Department's activities and responsibilities include:

- Providing claims administration
- Conducting tort settlements
- Administering the Workers' Compensation Program
- Member of the Operations Safety and Security Review Committee
- Maintaining accident statistics with regard to employees, vehicles and patron incidents
- Providing medical examinations and consultations for injured, rehabilitated, and new and transferred employees.

2.7.2.2 Director of Internal Audit Department

The Director of Internal Audit reports to the Chief Legal Officer. The Internal Audit Department's system safety activities and responsibilities include:

- Examining and evaluating the PRT's system of internal control
- Performing PRT's audits, third party contract audits, Standard of Conduct reviews, internal security program audits and other special projects

The Director of Internal Audit is supported in this effort by two Senior and two Associate Auditors.

2.7.2.3 Director of Legal and Consulting Services

The Director of Legal and Consulting Services reports to the Chief Legal Officer. Department activities and responsibilities include:

- Providing legal opinions to organization as necessary
- Conducting legal defense to claims, employment other suits and filings made against PRT
- Managing outside law firms
- Forecasting future expenditures for budgeting and planning
- Insurance – property and casualty risk management
- Risk identification, evaluation, control, funding and administration
- Loss prevention and self-insurance

2.7.2.4 Chief of Police and Security Services

The Police Chief is responsible for coordinating day to day operations that include:

- Criminal investigations
- Providing security for PRT's system including all operating facilities
- Protecting and safeguarding PRT's employees and riders
- Advocating for and allocating security and emergency preparedness program resources
- Assisting the IT dept in cybersecurity efforts
- Developing relations with local and state investigative agencies
- Providing support to PRT's System Safety Office in PennDOT, RTSRP, and NTSB investigations
- Taking appropriate action on security emergency preparedness concerns brought to the attention of the Operations Safety and Security Review Committee and other appropriate sources
- Identifying potential security and emergency preparedness concerns of all PRT employees
- Working to ensure that the PRT SEPP is implemented on a daily basis
- Ensures that the SEPP is reviewed and updated as needed, but at least annually

2.7.3 Chief Safety Officer

System Safety Department functions include the investigation of PRT accidents/incidents; conducting inspections and audits; conducting safety training; developing safety policies and procedures; and monitoring environmental and chemical compliance issues and report findings to the Environmental Program Manager. The Chief Safety Officer, as the appointed SMS Executive Manager, maintains a direct reporting line to the Chief Executive Officer for all critical safety matters and a dotted line day-to-day reporting relationship to the Chief Legal Officer

for general administrative and Department management functions. The Chief Safety Officer shall not serve in any other operational or maintenance capacity.

The Chief Safety Officer activities and responsibilities include:

- Serves as the PRT SMS Executive Manager with the authority and responsibility for day-to-day implementation and operation of its SMS.
- Chairs the Operations Safety and Security Review Committee
- Participates in project reviews and safety certification efforts
- Coordinates updating and revising PTASP, SEPP, EMP and other system- wide plans
- Coordinates SSO compliance/requirements
- Is notified of Employee Safety Reports (ESRs) including near miss incidents and events for investigation, review, tracking, and trending.
- Initiating and implementing control measures for reducing risks associated with procurement, modification and operation of the transit system.
- Developing accident investigative methodology for each category of severity and conducting investigations as warranted.
- Distributing recommendations for corrective actions that have been developed through the investigation process.
- Monitoring and evaluating corrective actions through the OSSRC.
- Oversees hazard identification and a risk reduction program for bus and rail revenue service as well as maintenance activities companywide.
- Oversees training programs delivered by the Safety Department
- Oversees semi-annual safety/fire inspections of all PRT facilities.
- Establishing system safety program requirements for contract service providers and vendors; reviewing specifications prior to requests for bid.
- Establishing and chairing committees to assist with system safety and various operations activities. Coordinating safety aspects of claims with claims and insurance administrators.
- Oversees planning and conducting of emergency drills and simulations.
- Scheduling and conducting internal and external safety reviews and internal safety audits.
- Assisting PRT management in coordinating external safety audits and participation in emergency response exercises.
- Developing, implementing and managing a comprehensive safety and health program in accordance with applicable federal, state and local provisions.
- Ensuring that the PTASP aligns with applicable regulations including federal, state and local requirements, laws, regulations, and codes.
- Assists in appointing key staff tasked with the development and implementation of the PTASP.
- Ensuring the promotion of safety expectations to employees and safety awareness to passengers.

- Develop processes for all employees to anonymously report safety concerns.

2.7.4 Chief Communications Officer

PRT Communications Division is headed by a Chief Communications Officer reports to the Chief Executive Officer and is supported by a Public Relations Manager, Internal Communications Program Manager, Senior Government and Community Relations Officer, Director of Marketing and Creative Services and Director of Advertising and Sales. Department Safety responsibilities include:

- Maintaining a liaison with the media following accidents and emergencies involving PRT and relaying any pertinent safety and security information to the public and the media.
- Communicating safety information to the public via print and electronic media
- Internal Marketing and Communications that include safety promotion and messaging for employees
- Completing creative design and production services for all company publications and materials, including safety messaging
- Assisting the Safety Department with safety promotional campaigns
- Signage displays featuring safety promotion on revenue vehicles
- Internal and external Web site information administration

2.7.5 Chief Human Resources Officer

Human Resources is responsible for assuring that staff positions are effectively defined and classified and that qualified personnel are identified and properly trained to meet staffing needs. Human Resources manage, coordinate and monitor all employee relations activities and employee benefit programs. This division also manages the employee assistance programs, including the program for substance abuse. In addition, Human Resources perform the following specific safety-related functions:

- Developing position descriptions that address safety-related restrictions and requirements.
- Developing and administering medical standards for specific job positions, as warranted.
- Ensuring that successful candidates for positions are capable of safely performing the tasks of these positions on a repetitive basis.
- Administering the application of PRT's employee discipline policy.
- Maintaining complete and current documentation in personnel files.
- Providing oversight and follow-up of site visits by health professionals (e.g., in connection with PRT's drug and alcohol testing program).

A Director of Benefits, Compensation Program Manager, Manager EAP, Director

Employee Relations/OEO, Director Employment and Development, an HRIS Specialist and staff support the Chief Human Resources Officer in this effort.

Their functions are as described below, and many are directly related to safety of PRT patrons and employees:

2.7.5.1 Benefits

- Employee health care benefits
- Retirement planning and counseling
- Sick leave administration

2.7.5.2 Compensation

- Human Resources Management Systems
- Job evaluations
- Administration of Performance Management Program
- Job analysis, wage and salary studies
- Administering the Unemployment Compensation Program
- FMLA Administration

2.7.5.3 Employee Assistance Program

- Administer Employee Assistance Programs

2.7.5.4 Employee Relations/Office of Equal Opportunity

- Developing and administering the Equal Employment Office (EEO) Program.
- Monitoring hiring, promotions, terminations and training as an equal opportunity employer
- Administering the Disadvantaged Business Enterprise (DBE) Program
- Monitoring DBE compliance
- Developing and administering Affirmative Action Program
- Investigating and processing discrimination complaints
- Negotiating, interpreting and administering various collective bargaining agreements
- Providing direction to line management in all matters concerning labor and employee relations
- Responsible for all activities of Labor Management Committees
- Oversight of the grievance procedure and arbitrations

2.7.5.5 Employment and Development Department

- Hiring, promotions and transfers

- Applicant testing
- Job postings
- Providing compliance and management development training for supervisory and management personnel
- Providing development opportunities for professional and administrative employees
- Providing computer training for PeopleSoft and Microsoft Office products
- Providing internal consulting services to leaders and teams throughout PRT
- Drug and Alcohol Compliance Program

2.7.6 Chief Strategy Officer

PRT combines budget, payroll and accounting into one cohesive Finance Division whose Chief Strategy Officer reports to the Chief Executive Officer. The Finance Division encompasses six functions: Accounting, Financial Planning and Budgets, Cash Management, Purchasing and Materials, Grants and Capital Programs and Administrative Services. Specific safety-related functions of the Finance Division include facilitating achievement of PTASP objectives through preparation and control of PRT's budget, staffing level recommendations and monitoring and control of capital programs. Department activities and functions include:

2.7.6.1 Accounting Department

Within the Accounting Department, three Managers report to the Chief Strategy Officer. These areas include: Payroll, Accounts Payable and Operating Accounting. Functions of the group include:

- Issuing paychecks
- Paying vendors
- Maintaining ledgers and balance sheets
- Invoicing and receivables

2.7.6.2 Financial Planning and Budgets Department

- Annual Budget
- Monthly Statements
- Cash Flow Models
- Financial Analysis
- FTA and PennDOT Reports

2.7.6.3 Cash Management

- Manage Brinks Contract (includes collection of farebox receipts and revenue service at TVM's)

- TVM maintenance
- TVM complaint investigation
- Change machines
- Third Party retailers (RSOT's)
- Off-board fare collection
- AFCS
- AFCS IT support

2.7.6.4 Purchasing and Materials Management

- Ensuring that the procurement process complies with established procedures for evaluating materials and products for use by PRT.
- Including safety requirements in contracts such that contractors must meet all applicable state, federal and local regulations as well as PRT's requirements.
- Developing and maintaining a list of hazardous materials and equipment.
- Enforcing safety procedures related to hazardous substance acquisition, handling, labeling, storage, disposal and record keeping.
- Purchasing of materials, goods, supplies and services (professional, non-professional and construction).
- Disposition/sale of obsolete inventory and retired equipment or vehicles.
- Contract Administration.
- Monitoring inventory levels and establishing appropriate reorder points.
- Identifying obsolete and inactive inventory.
- Distributing parts, materials and supplies to operating locations.
- Ensuring that material handling and storage practices comply with applicable standards.

2.7.6.5 Grants and Capital Programs

- Develop and monitor capital programs related to organizational safety and security requirements.
- Assist with development of Homeland Security Grants and track all expenditures related to such grants.

2.7.7 Chief Information Officer

The PRT's Information Technology Division is overseen by a Chief Information Officer who reports directly to the Chief Executive Officer and is responsible for oversight of all technology projects including the purchase, installation and maintenance of all hardware and software throughout the organization. The CIO is responsible for information/cyber security within the PRT. Continual and reliable operation of the PRT computer network, application software and other subsystems and infrastructure is a necessity for the safety operation of the transit system. The Chief Information

Officer is supported by the Director of Enterprise Software, Director of IT: Infrastructure, Director(s) of Transportation Technology, and Director of Customer Engagement. Information Technology also oversees the installation and general maintenance of the Local Area Network (LAN) and Wide Area Network (WAN) networks along with all Production and Disaster Recovery Data Centers.

2.8 Chief Operating Officers – Transportation/Maintenance

The Bus/Rail Operations and Maintenance Divisions are headed by the Chief Operating Officer – Transportation and Chief Operating Officer - Maintenance who both report to the Chief Executive Officer. The Bus/Rail Operations Division under the direction of the COO - Transportation is responsible for providing safe and reliable daily service on all scheduled bus/rail routes. The COO – Maintenance is responsible for maintaining vehicles and other assets that support both bus and light rail operational activities. The COO – Maintenance directly oversees the Manager of Bus Maintenance Support, Manager of Vehicle Projects, Business Analyst – Operations, the Manager of Main Shop, and the Manager of Non-Revenue Vehicle Maintenance. Safety related responsibilities of the COO's are numerous and cover all aspects of Operations and Maintenance. The safety related functions of all PRT management are further delineated below and all management is responsible for assisting in fulfilling the scope and purpose of the PTASP as noted in section 2.2.

2.8.1 Deputy Chief Operating Officers

The Chief Operating Officers are supported by two Deputy Chiefs. The Deputy Chief of Transportation oversees the Director of Bus/Rail Operations, Manager of Facilities, Directors of Service Delivery (Bus and Rail) and the Director of Training. The Deputy COO – Maintenance assists the COO-Maintenance with oversight of the Managers of Bus Maintenance at all locations and the Manager of Railcar Maintenance. Safety-related responsibilities of each are numerous and cover all aspects of Operations and Maintenance. The safety related functions of each Deputy Chief are further delineated under each of the subordinate positions.

2.8.2 Director of Road Operations

Road Operations within the Bus/Rail Operations Division, headed by a Director, is responsible for monitoring field operations and personnel working in the field under routine and emergency conditions. In addition, Road Operations makes personnel observations to ensure compliance with safety rules and directs and implements restoration of service activities when required. Service restoration activities related to bus/rail service operations include vehicle and equipment troubleshooting, accident/incident investigation and coordinating on-site operational type activities with external service providers.

Director of Road Operations and staff activities and responsibilities include:

- PRT's continuous effort of identification of any operating hazards that require formal implementation of the Hazard Resolution Procedure.
- Assisting the coordination of external/internal safety audits and participating in emergency response exercises
- Monitoring bus/rail operations by means of field supervision and radio dispatching via BTO (Bus Traffic Operations) and RTO (Rail Traffic Operations).
- Directing operators during emergencies and personnel as required by circumstances.
- Arranging removal of defective or damaged equipment.
- Investigating reports of unsafe conditions.
- Responding to accident locations and initiating accident investigation process as required.
- Facilitate private carrier busway permits
- Coordinate all special service activities (special events)
- Coordinate all student transportation contracts
- Monitoring private carrier busway activity

A Manager of Road Operations, Assistant Managers, Movement Directors and a staff of Road Operations Supervisors support the Director in this effort.

2.8.3 Directors of Bus Service Delivery

The Bus Service Delivery function is headed by Directors of Service Delivery at the four bus operations locations. There are two departments within each bus garage, Bus Maintenance reporting to the COO - Maintenance and Bus Service Delivery reporting to the COO - Transportation. The PRT bus system utilizes preventive maintenance programs that involve performing maintenance on vehicles at regularly scheduled mileage or life cycle driven intervals. Bus Maintenance is responsible for all running repair, inspection work, preventive maintenance, vehicle servicing, cleaning, fueling and preparing vehicles for schedule.

The Directors of Bus Service Delivery within each bus garage are responsible for activities that include:

- Administering and monitoring standardized programs, policies and procedures
- Coordinating daily activities of dispatchers, clerks and secretaries
- Assisting with implementation and monitoring of PRT's Drug and Alcohol Program

Each Director is supported in this effort by Assistants to Director of Service Delivery and Dispatchers.

2.8.4 Director of Bus and Rail Operations

This function within the PRT Operations Department, headed by the Director of Bus and Rail Operations provides support to the operating locations with regard to dispatcher staffing, training, and development. The operations and development activities include:

- Hiring of location Dispatchers
- Training and development of location Dispatchers
- Creation of Dispatch Extra list and PDIA list.
- Assist in PTASP implementation.
- Monitoring and providing reports on operator of hours of service.

2.8.5 Director of Rail Service Delivery

The Director of Rail Service Delivery is responsible for providing safe and reliable daily service on all scheduled PRT light rail routes. The responsibilities include both operation of the light rail vehicle service and all maintenance of the major sub-systems of the light rail system, three dedicated busways, park and rides, bridges, tunnels, parking garage, incline, and in addition, considers safety of the employees working on the light rail/busway system. The Assistant to the Director of Rail Service Delivery and the various Managers in Rail Service Delivery support the Director of Rail Service Delivery in this effort.

The Director of Rail Service Delivery safety related activities and responsibilities include:

- Coordinating with the Chief Safety Officer to incorporate PRT's safety policy, rules and procedures in verbal instruction and hands-on training of Rail Operators and all personnel in the Way, Power, and LRT Systems Departments.
- Continuously identifying any operating hazards within the light rail/busway system that require formal implementation of the Hazard Resolution Procedure.
- Ensuring that all Operations and Maintenance adhere to established standard operating procedures, bulletins, rules and the processes set out in the PTASP, Rulebook, and SOPs.
- Assisting as needed in the coordination of external/internal safety audits and participating in emergency response exercises.
- Coordinating with the Chief Safety Officer on System Safety requirements.
- Taking appropriate action to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating the development and testing of engineering solutions as a means of addressing vehicle-related hazards.

2.8.5.1 Assistant to the Director of Rail Service Delivery

The Assistant. to the Director of Rail Service Delivery and staff safety related activities and responsibilities include:

- Administering and monitoring standardized programs, policies and procedures of the rail system for Operators/Off Board Fare Collectors.
- Coordinating with the Chief Safety Officer to incorporate PRT's safety policy, rules and procedures in verbal instruction and hands-on training of Rail Operators/Off Board Fare Collectors.
- Continuously identifying any operating hazards within the light rail system that require formal implementation of the Hazard Resolution Procedure.
- Ensuring that Rail Operators adhere to established standard operating procedures, bulletins, rules and the processes set out in the PTASP, Rulebook, and SOPs.
- Assisting as needed in the coordination of external/internal safety audits and participating in emergency response exercises.
- Coordinating and overseeing safety-related activities of Rail Operators ensuring compliance with the PTASP.
- Assist with implementation of PRT's Drug and Alcohol Program for Rail Operators.
- Coordinating with the Chief Safety Officer on System Safety requirements.
- Administering safety programs and initiatives for rail operators.
- Taking appropriate actions to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating the development and testing of engineering solutions as a means of addressing vehicle-related hazards.

2.8.5.2 Manager of Railcar Maintenance

Railcar Maintenance supports Rail Service Delivery by ensuring that all rail revenue vehicles and equipment are safe in design and use, highly reliable, clean and available for service on a timely basis. These tasks are accomplished by a well-trained and experienced staff. The Manager of Railcar Maintenance reports to the Chief Operating Officer-Maintenance. Responsibilities include:

- Assuring that the rail car fleet is properly maintained and available in safe operating condition according to PRT's procedures.
- Providing necessary mechanisms for reporting defects and hazardous conditions.
- Administering and monitoring standardized programs, policies and procedures.
- Assist with implementation of PRT's Drug and Alcohol Program.
- Coordinating with the Chief Safety Officer on system safety requirements.

- Administering safety programs for department employees.
- Monitoring the collection and disposal of waste (e.g., oils and clarified wastewater sludge) to effect safe handling and minimize employee and environmental exposure to potentially hazardous products and materials.
- Taking appropriate action to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating the development and testing of engineering solutions as a means of addressing vehicle-related hazards.
- Coordinating with the Chief Safety Officer in the development and implementation of risk reduction measures associated with the operation and maintenance of PRT light rail revenue vehicles. Assists the Chief Operating Officer - Maintenance and System Safety in hazard recognition and mitigation.
- Monitoring procurement practices to ensure that safety is not compromised in replacing parts.
- Monitoring man-machine interfaces.
- Where applicable, participating in the development of technical equipment specifications and procedures that address the safety requirements of regulatory agencies and PRT. Ensuring that replacement equipment meets safety requirements prior to acceptance. Examining equipment and systems to explore the potential for increased efficiencies and improvements in user and fire safety as well as in performance.
- Assuring that the communications electronic systems are properly maintained and operational on a daily basis. Ensuring that equipment is in compliance with manufacturer specifications, federal requirements and directives.
- Ensuring that all emergency communications electronic equipment is in compliance with organizational requirements along with the associated guidelines.
- Monitoring compliance of organizational policies and procedures.
- Ensuring that applicable safety practices and procedures are adhered to relative to the communications and electronic service industry.

The Manager of Railcar Maintenance is supported by Assistant Managers, Shop Section Supervisors, Car house Forepersons, a Warranty Administrator, Technicians, Mechanics, Service Persons, Maintenance Clerks, and Building Maintainers.

2.8.5.3 Manager of Track and Way

The Manager of Track and Way reports to the Director of Rail Service Delivery and assures all light rail track and busways are maintained and in proper condition to provide for safe, reliable, rail and bus service. The Track and Way Manager uses PRT's Track Inspection Standards as well as other industry and PRT documents as

a benchmark for overseeing the safe condition of the rail and other structures. In addition, they assist the Director of RSD and System Safety in hazard recognition and mitigation.

- Assist with implementation of PRT's Drug and Alcohol Program for Way Dept employees.
- Coordinating with the Chief Safety Officer on system safety requirements.
- Administering safety programs for department employees.
- Taking appropriate action to resolve reported or otherwise identified hazards in a timely manner. As appropriate, and with System Safety, coordinating the development and testing of solutions as a means of addressing track or other hazards.
- Coordinating with the Chief Safety Officer in the development and implementation of risk reduction measures associated with track, switch, busway, bridge and other system appurtenances.
- Monitoring procurement practices to ensure that safety is not compromised in replacing parts.

The Way Department is responsible for performing the following maintenance and upkeep functions:

- concrete work
- bridge repairs
- shop repairs (cement/steps/railings)
- drain repairs
- fence repairs
- track repairs
- grass cutting
- tree removal
- asphalt repairs
- retaining wall repairs
- oil spill clean up
- debris clean up on PRT right of ways (landslides/flooding)
- incline rail and tie repairs
- snow removal (by hand and by vehicle plowing)

2.8.5.4 Manager of LRT Systems and Power

The Manager of LRT Systems and Power reports to the Director of Rail Service Delivery. The Department is responsible for the maintenance of signals, overhead wire and power for light rail vehicles. The Manager of LRT Systems and Power uses industry standards and PRT documents as a benchmark for overseeing the condition of the light rail transit systems which they oversee.

- Assist with implementation of PRT's Drug and Alcohol Program for department employees.
- Coordinating with the Chief Safety Officer on system safety requirements.
- Administering safety programs for department employees.
- Taking appropriate action to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating with System Safety in the development and testing of solutions as a means of addressing known hazards.
- Coordinating with the Chief Safety Officer in the development and implementation of risk reduction measures associated with the operation and maintenance of the power and signaling systems.
- Monitoring procurement practices to ensure that safety is not compromised in replacing parts of or entire systems.

The systems include traction power, OCS, Rail/Busway signals (train control, electric track switches, railroad grade crossings, pedestrian flashers on the busway/rail line and gating systems for HOV tunnel).

2.8.5.5 Manager of Bus/LRT Electronics/Communications

The Manager of Bus/LRT Systems-Electronic Communications reports to the Rail Service Delivery Director. This position manages the planning and scheduling of all Bus/LRT Systems work as it pertains to electronic/communications equipment. Provides technical oversight and assistance that supports the repair and maintenance of all Port Authority's electronic/communication assets, and oversees administrative activities, outside contracts, capital project activities as related to Bus/LRT Systems department. This department manager is dedicated to the reliability of all systems that comprise of Bus/LRT Systems.

- Oversees the daily maintenance and repair of all electronic/communications equipment in use at Port Authority; responds to routine and emergency service and repairs request in a 24/7 environment.
- Directly supervises the department's First Level Supervisors and has overall responsibility for all hourly personnel in the departments. Schedules after hours maintenance to allow for the most efficient use of manpower; approves and tracks all overtime for the department. Provides technical assistance/instructions as required, maintains employee records for supervisors, provides constructive feedback on performance to supervisors and initiates in enforcing Port Authority's policies and procedures including the performance code.
- Gathers all data related to RTO/BTO for change of state logs, radio recordings, and other pertinent data for transportation operations management related to accident/disciplinary investigations
- Participates in training and mentoring of Movement Directors and Route

Forepersons in RTO/BTO.

- Oversee all handheld and non-revenue vehicle communications repair/upgrades and installation voice communications systems including but not limited to Base Radios, Repeaters, Microwave Towers, and fiber control/indication systems utilized by Bus/Rail Operations, Police, and Maintenance employees of the Port Authority.
- Ensures all technical requirements of the timely maintenance activities are in compliance with departmental objectives; reports to the Director of Rail Service Delivery updates related to the status of the technical projects assigned to the department; ensures all field activities are on time and in compliance with standard recognized practices and procedures of the industry.
- Through others, maintains all operational structures at a high status of readiness and supplies immediate repair support under any emergency conditions.
- Communicates with equipment manufacturers and vendors to determine the requirements needed for maintenance and repair; ensures the preventative maintenance activities are completed, documented and submitted in a timely manner.
- Coordinates maintenance requirements and activities as they relate to the department; plans for both short and long-term equipment maintenance; ensures that the supervisors are completely informed of the daily activities and submits recommendations for updates or modifications to equipment.
- Supervises the installation of new electronic/communication equipment and processes repair parts requests as required for maintenance activities, researches replacement components for suitable substitutes.
- Works with committee to ensure MAP and all training activities are documented and in compliance; develops in house training requirements and curriculum.
- Prepares the departmental budget and details variance explanations when applicable.
- Ensures compliance and support in utilization of Maintenance Work Order System MWOS integration and application.

2.8.5.6 Manager of Facilities

The Manager of Facilities reports to the Deputy Chief Operating Officer for Transportation. The Manager of Facilities uses industry standards and PRT documents as a benchmark for overseeing the safe condition of the buildings, stations, platforms, stops, and other structures which they oversee. In addition, they assist the Director of RSD and System Safety in hazard recognition and mitigation for both customers and employees.

- Assist with implementation of PRT's Drug and Alcohol Program for department employees.
- Coordinating with the Chief Safety Officer on system safety requirements.
- Administering safety programs for department employees.
- Taking appropriate action to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating the development and testing of solutions as a means of addressing facilities, station, stop, and building related hazards.
- Coordinating with the Chief Safety Officer in the development and implementation of risk reduction measures associated with the maintenance of all Facilities. Assists the Deputy Operating Chief in hazard recognition and mitigation.
- Monitoring procurement practices to ensure that safety is not compromised in replacing parts and systems.

The Facilities Department is responsible for performing the following maintenance and repair functions:

- plumbing
- heating and air conditioning
- wiring repairs
- stations/support facility AC power distribution
- elevators/escalators
- incline controls and building facility maintenance
- building repairs (walls, etc.)
- platform repairs
- painting
- tunnel ventilation fans, dampers, controls
- subway maintenance
- snow removal (hand)
- all lighting
- shelter/platform cleaning
- drywall, flooring, carpentry.

2.8.5.7 Director of Training

The Director of Training responsibilities include the design, planning, and implementation of PRT Operations training programs for operators, dispatch, MAP, maintenance and first-level supervisors. This position reports to the Deputy Chief Operating Officer – Transportation. These include:

- Ensures safety of customers and employees is the top priority in all training.
- Works closely with the System Safety Department to set safety targets and goals

- Works closely with the Chief Safety Officer to instill a culture of safety throughout PRT by inclusion of safety into all training programs
- Assist with implementation of PRT's Drug and Alcohol Program for department employees.
- Administering safety programs for department employees.
- Taking appropriate action to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating with System Safety in the development and testing of solutions as a means of addressing operational hazards.
- Coordinating with the Chief Safety Officer in the development and implementation of risk reduction measures associated with bus and rail operations.
- Coordinates with the Chief and Deputy Chief Safety Officer to incorporate PRT's safety policy, rules and procedures in verbal instruction and hands-on training.
- Collaborates with functional management teams to assess ongoing and future training and development needs
- Assures operational and safety effectiveness of established programs
- Develops program delivery schedules that provides operations training on a scheduled and as-needed basis.
- Approves new training techniques and suggests enhancements to existing training programs.
- Manages and develops operations training professionals.

2.8.5.8 Manager of Maintenance – Bus

The Managers of Maintenance report directly to the Deputy Chief Operating Officer – Maintenance. The Managers are responsible for Pennsylvania Motor Vehicle Safety Inspections, ensuring that fueling, servicing, route assignments, preventative maintenance, and corrective maintenance are performed on vehicles in accordance with established maintenance programs. Manages, coordinates, and monitors preventative and corrective maintenance, servicing, and cleaning of the bus fleet in accordance with maintenance philosophy and programs established by the Chief Operations Officer. The Manager of Maintenance at the East Liberty Division is also responsible for coordinating system-wide towing of buses and large trucks and providing road call service for buses experiencing mechanical problems. Service truck #607 responds to road calls during the hours of 6:00 a.m. to 6:00 p.m., primarily in the downtown and Oakland areas.

- Assuring that the Bus fleet is properly maintained and available in safe operating condition according to PRT's procedures.
- Providing necessary mechanisms for reporting defects and hazardous conditions.

- Administering and monitoring standardized programs, policies, and procedures.
- Assist with implementation of PRT's Drug and Alcohol Program.
- Taking appropriate action to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating the development and testing of engineering solutions as a means of addressing vehicle-related hazards.
- Assists the Chief Operating Officer - Maintenance and System Safety in hazard recognition and mitigation.
- Monitoring compliance of organizational policies and procedures.
- Monitoring the collection and disposal of waste (e.g., oils and clarified wastewater sludge) to effect safe handling and minimize employee and environmental exposure to potentially hazardous products and materials.

2.8.5.9 Manager of Bus Maintenance Support

Manages all support level maintenance for bus vehicle fleets. Plans and coordinates fleet maintenance activities completed outside the bus divisions. Monitors bus fleet size and service requirements and plans for future procurements and service needs accordingly. Works with the Manager of Vehicle Projects and Chief Operating Officer - Maintenance on new bus procurements. Coordinates activities related to new bus procurement (i.e., specifications, vendor reviews, production, inspections, component testing, etc.) and works directly with the Purchasing & Materials Management Department on bus procurement projects.

- Assuring that the Bus fleet is properly maintained and available in safe operating condition according to PRT's procedures.
- Taking appropriate action to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating the development and testing of engineering solutions as a means of addressing vehicle-related hazards.
- Providing necessary mechanisms for reporting defects and hazardous conditions.
- Administering and monitoring standardized programs, policies, and procedures.
- Assist with implementation of PRT's Drug and Alcohol Program.

2.8.5.10 Manager of Vehicle Projects

Directs and coordinates support level bus procurement and technical support for Port Authority's revenue vehicle bus fleet, and technical parts review under the general directions of the Chief Operations Officer – Maintenance Oversees the daily activities and direction of the Vehicle Project Coordinator and Quality Assurance and Contract Specialist.

- Providing necessary mechanisms for reporting defects and hazardous conditions.
- Administering and monitoring standardized programs, policies, and procedures.
- Assist with implementation of PRT's Drug and Alcohol Program.

2.8.5.11 Business Analyst – Operations

Primary responsibility to elicit, analyze, validate, specify, verify, and manage the project requests from stakeholders, within Operations, for both the Transportation and Maintenance Divisions. The Business Analyst serves as an assistant to the Chief Operating Officer – Maintenance and is a conduit between Operations and Finance. The Business Analyst is also responsible for generating and compiling reports based on the findings, complete with probable causes and possible solutions to departmental issues.

- Administering and monitoring standardized programs, policies, and procedures.

2.8.5.12 Manager of Main Shop

The Main Shop provides support to the bus divisions by rebuilding and overhauling vehicles and vehicle components, repairing vehicles involved in major accidents, managing the Vehicle Overhaul Program (VOH). The objectives of the Main Shop are to reduce repair costs and vehicle out-of-service time, to improve the overall performance, comfort, appearance, and safe operation of vehicles, and to overhaul vehicles in accordance with the VOH timeframe. The Main Shop is part of the Bus Maintenance Department and is primarily responsible for performing major overhauls, repairs, and rebuilds of all buses and their components. The Main Shop is staffed by the Manager of Main Shop, Assistant Manager of Main Shop, five Shop Section Supervisors, the Fleet Maintenance Clerk, and the Warranty Specialist. It is located at Manchester and is comprised of several shops where vehicle maintenance overhaul and rebuilding work is performed. Plans, directs, and coordinates work assignments for engine and component rebuild and body and paint repair functions performed at Manchester Shop. Coordinates communication between the Main Shop and Operating locations to meet rebuild, body and paint repair demands.

- Oversees methods of operations used for all maintenance activities related to major mechanical and electrical component rebuilds. Plans, directs, and supervises work assignments for component rebuild employees.

- The purpose of the Main Shop is to provide support to the bus divisions by rebuilding and overhauling vehicles and vehicle components, to repair vehicles involved in major accidents, to manage the Vehicle Overhaul Program (VOH), and to provide support to other Port Authority departments and divisions
- Coordinates parts, materials, and supplies purchased with Shop Section Supervisors and Procurement personnel.
- Assuring that the Bus fleet is properly supported for the 4 Garages and available in safe operating condition according to PRTs procedures.
- Providing necessary mechanisms for reporting defects and hazardous conditions.
- Administering and monitoring standardized programs, policies, and procedures.
- Assist with implementation of PRT's Drug and Alcohol Program.
- Taking appropriate action to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating the development and testing of engineering solutions as a means of addressing vehicle-related hazards.
- Assists the Chief Operating Officer - Maintenance and System Safety in hazard recognition and mitigation.
- Monitoring compliance of organizational policies and procedures.
- Monitoring the collection and disposal of waste (e.g., oils and clarified wastewater sludge) to effect safe handling and minimize employee and environmental exposure to potentially hazardous products and materials.

2.8.5.13 Manager of Non-Revenue Vehicle Maintenance

The Manager of Non-Revenue Vehicle maintenance reports directly to the Chief Operating Officer – Maintenance. The Manager is responsible for Pennsylvania Motor Vehicle Safety Inspections and maintaining Non-Revenue Vehicles and Equipment fleet is to supply and maintain the many diverse non-revenue vehicles and equipment needed to conduct the daily business at PRT. These vehicles range from small passenger vehicles up to large steel hauling equipment that can travel our rail lines. The Non-Revenue Vehicles and Equipment department provides and maintains all the support equipment needed to maintain the buildings and infrastructures used throughout our system. These assets include fork trucks, man lifts, street sweepers, ride on sweepers and floor care machines.

Manages, coordinates, and monitors preventative and corrective maintenance, servicing, and cleaning of the fleet in accordance with maintenance philosophy and programs established by the Chief Operations Officer.

- Assuring that the non-Revenue fleet is properly maintained and available in safe operating condition according to PRTs procedures.

- Providing necessary mechanisms for reporting defects and hazardous conditions.
- Administering and monitoring standardized programs, policies, and procedures.
- Assist with implementation of PRT's Drug and Alcohol Program.
- Administering safety programs for department employees
- Monitoring the collection and disposal of waste (e.g., oils and clarified wastewater sludge) to effect safe handling and minimize employee and environmental exposure to potentially hazardous products and materials
- Taking appropriate actions to resolve reported or otherwise identified hazards in a timely manner. As appropriate, coordinating the development and testing of engineering solutions as a means of addressing vehicle-related hazards.

2.9 Chief Development Officer

The Chief Development Officer oversees the Planning and Engineering Division and reports directly to the Chief Executive Officer. The Chief Development Officer is supported by a Chief Engineer, Director of Planning and Director of Scheduling.

2.9.1 Service Development

The Service Development Department, headed by the Director for Service Planning & Scheduling, is responsible for two (2) functional areas: Scheduling & Service Development and Data & Passenger Amenities. This Department is also responsible for monitoring route productivity; developing service standards; developing and disseminating public timetables and rider information; maintaining scheduling and stop databases including GPS data; managing uniform contracts, development of fare, stop and service policies; and fare instruments, in addition to:

- Ensuring that Service Delivery schedules allow sufficient running time for safe operations at speed limits and adequate recovery time for bus and rail operators.
- Investigating operator complaints of insufficient running time. Reporting any suspected or known safety hazards to System Safety and other operations departments as needed.
- Working with System Safety to reduce and mitigate known hazards.
- Developing work runs and schedule relief in accordance with collective bargaining agreements and regulatory requirements.
- Monitoring over 7,000 bus stops and approximately 202 shelters and develops fare, stop and service policies.
- Performs paratransit planning required in Americans with Disabilities Act, works with the Committee for Accessible Transportation (CAT) representing transit riders with disabilities.

2.9.2 Planning

The Planning Department, headed by the Director of Planning, is responsible for four (4) functional areas: Transit Analysis (TA), Transit-Oriented Communities (TOC), Long-Range Planning (LRP) and General Planning (GP). These functional areas are responsible for:

- Developing data cleaning processes, visualizations and analyses to support the work of the Planning and Development Division and other Divisions as needed (TA)
- Maintaining a GIS program to support organizational geodatabases and mapping (TA)
- Prioritizing and planning improvements to existing stations and station areas along PRT's fixed guideway network, as well as planning for future station infill development (TOC)
- Coordinating with and informing internal stakeholders across various Divisions (including Safety Staff) on Planning Division and public realm infrastructure projects (GP)
- Coordinating with and informing external planning partners (municipalities, developers and authorities) on public realm and transit infrastructure projects and land use planning (TOC, GP)
- Developing long-range and system-level plans for PRT (LRP)
- Developing corridor infrastructure plans for expanding the fixed guideway transit system (LRP, GP)
- Prioritizing and developing infrastructure plans to support both Planning and Service Development needs in the public realm such as infrastructure that supports efficient, accessible and safe bus stops, bus routes, and pathways to and from stops and stations for riders (GP)

2.9.3 Engineering/Technical Support

The Engineering/Technical Support Department headed by the Chief Engineer and is responsible for providing engineering and technical support and oversight for the design and construction of PRT capital projects. The Chief Engineer and entire Engineering staff must ensure that all capital, engineering, and maintenance projects, system wide, follow required FTA and PennDOT safety requirements. The Chief Engineer is supported by 2 Directors of Technical Support and Capital Programs and various Program Managers

2.9.3.1 Director of Technical Support/Capital Programs

The Director of Technical Support/Capital Programs (2) responsibilities include:

- Ensuring that equipment purchased by PRT meets safety requirements

- Ensure that all capital projects follow required FTA and PennDOT safety requirements.
- Ensuring that design requirements have been coordinated with all appropriate departments

The Director of Technical Support/Capital Programs (2) are supported (4) Capital Program Managers (Manger of Capital Programs – Systems, Manager of Capital Programs – Facilities, Manager of Capital Programs – Expansions, and Manager of Capital Programs – Structures) and a staff that includes:

- Budget & Project Control Analysts
- Railcar Engineer and Power/Railcar Engineer
- Systems/Facilities Engineers and Sr. Engineers
- Sr. Engineering Technicians
- Sr. Environmental Specialist
- Project Architects
- Drafter
- Specifications Writer

The Director of Technical Support/Capital Programs and staff safety related activities and responsibilities include:

- Administering warranty programs for Capital Projects
- Coordinating major equipment rebuild, repair and retrofits
- Performing inspection and testing activities necessary to ensure that equipment, supplies and operations result in the desired level of safety
- Reporting any suspected or known hazards to System Safety and working forward with System Safety to reduce or eliminate the hazard(s).
- Establishing and maintaining current drawings for PRT facilities and systems
- Analyzing equipment failures and identifying trends
- Documenting equipment and facility modifications and informing affected staff of these modifications.
- Lead derailment investigation for derailment committee that in turn develops findings and recommendations
- Assisting in accident investigations when required.
- Administering/monitoring construction contracts to ensure that the contractor's procedures conform with current PennDOT and OSHA regulations and that the results are safe for PRT and/or public use
- Monitoring the installation of facilities, systems and equipment to ensure compliance with contractual requirements and procedures
- Technical Specification Writing
- Coordinating communications concerns relative to joint missions and training exercises with local municipalities and the City of Pittsburgh.

- Approval of any new, upgraded or modification of communications or electronic systems
- Environmental Impact studies
- Emergency response to hazardous waste, chemical spills and/or other issues required by regulation

2.10 Operations Safety and Security Review Committee (OSSRC)

The OSSRC has been established to facilitate safety and security coordination among departments and between management and front-line workers and their union leadership. Chaired by the Chief Safety Officer, the Committee is charged with the responsibility of assisting the Chief Executive Officer in maintaining a high level of system safety and security. This committee brings together the common sense, technical expertise and unique perspectives of a variety of staff to focus upon system safety/security issues. The committee functions as the interdepartmental unit empowered to lead PRT in hazard management efforts.

The OSSRC's responsibilities include but are not limited to identifying and recommending risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the PRT's safety risk assessment, identifying mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended, and identifying safety deficiencies for continuous improvement and approve the PRT's agency safety plan each year. The OSSRC also focuses on company-wide unresolved safety and security issues, hazards, and resolutions beyond the authority or scope of the Operations Division Safety Committees and also may address safety matters and corrective actions related to Safety Event Review Team (SERT) work and other hazards. Senior Management, Division Safety Committees, and the Safety Event Review Team (SERT) may forward serious and/or company-wide credible safety hazards and issues to the OSSRC for review, action, and resolution. This committee meets monthly and is comprised of Senior Staff and Director-level Management personnel and frontline ATU represented employees. The committee's membership consists of an equal number of ATU Local 85 Leadership selected frontline employee representatives as well as PRT management representatives. ATU local 85 Leadership as well as other management employees may also attend meetings in an advisory capacity to the committee. In the event a committee member cannot attend a meeting, they may appoint an alternate to attend the meeting. The Chief Safety Officer chairs the OSSRC and is responsible for tracking items through monthly detailed meeting minutes as well as seeing that any issue rated as unacceptable is added to the CAP log.

The OSSRC assists in the implementation of all PRT's safety/security-related activities. Typical tasks will include:

- Assuring implementation of the PTASP. At least annually, review recommendations made by the System Safety Department for updating the

PTASP and provide comment and input in response to same. Once the OSSRC has completed its annual review of the proposed PTASP updates, it is then presented to PRT's Board for final review and approval as required by federal safety law and regulations.

- Monitoring compliance of each department with specific safety responsibilities and procedures as set out in the PTASP by reviewing the results of safety audits conducted by the System Safety Department.
- Participating in accident/incident investigations as appropriate and in accordance with PRT's established procedures. The type of accident/incident dictates who investigates the accident/incident, appropriate forms or reports to be used and who is to be notified.
- Performing system safety review functions as required. Coordinating and follow up with any external safety audits; participate as required (e.g., PennDOT RTSRP, annual fire prevention, peer reviews).
- Collecting, analyzing and reporting safety and hazard data such as Workers Comp/employee injuries, bus and light rail accidents, transit worker assaults, trespassing incidents and others Review maintenance and failure rate data to identify safety problems.
- Utilizes PRT Safety Risk Matrix to assess hazards and potential consequences
- Reviewing any data and trends regarding hazards or other safety issues that are transmitted from the Safety Event Review Team (SERT)
- Reviewing results of safety inspections, emergency drills, simulations, and tests. Develop action as appropriate.
- Operations members will report any mitigations that are deemed ineffective, inappropriate or that have not been implemented as intended during the OSSRC monthly meetings or to the CSO prior to the meeting. The CSO will report such mitigations to the OSSRC once received and verified.
- Preparing written documentation of all meetings, tasks, activities, investigations, analyses and recommendations, and following up on all pending matters.
- Establishing safety goals and objectives as defined by the PRT employee safety program.
- Transit worker assaults and identifying means to further reduce and prevent same.

The OSSRC meets at least once per month. Committee members number eight (8) total and include:

ATU Local 85 Frontline Employee Representatives – 4 Total

- Frontline represented employee – Operations (2, Bus or Rail)
- Frontline represented employee – Maintenance (2 Bus or Rail)

Management Representatives – 4 Total

- Chief Safety Officer
- Chief of Transit Police
- Chief Operating Officer – Transportation

- Chief Operating Officer – Maintenance

In addition to the above OSSRC members, and to ensure that Local 85 leadership and other PRT management representatives that often have valuable information for the committee's review and consideration can continue to participate on the OSSRC, the following individuals may also serve as advisors to the committee and attend and participate in OSSRC meetings and related activities in furtherance of supporting the committee's work:

ATU Local 85 OSSRC Advisors – 3 Total

- President
- Business Agent - Transportation
- Business Agent - Maintenance

Management OSSRC Advisors – 3 Total

- Director of Claims
- Director of Rail Service Delivery
- Chief Engineer or Other Engineering and Technical Support Representative

2.10.1 Operations Division Safety Committees

These safety committees are located at each major operating location including Ross, Collier, West Mifflin, East Liberty, Manchester, and the Light Rail System to include South Hills Junction and meet on a monthly basis. Their members monitor activities with respect to that location and assess real, potential, and credible hazards to ensure safe and secure working conditions for employees throughout the entire Division, its maintenance areas, and its service area. Each committee's membership shall consist of an equal number of frontline employee representatives and management representatives. ATU Local 85 leadership as well as other management employees may also attend meetings as advisors to each committee. In the event an official member cannot attend a meeting, they may appoint an alternate to attend the meeting. Members are included on each committee to represent Operations and Maintenance Management. Union represented Operators and Maintenance persons are also appointed to the committees via appointment by ATU Local 85 leadership. The committee responsibilities encompass on the road/route issues, revenue service vehicle issues, and other types of vehicles as well. Management and Safety representatives at each location will initiate and coordinate efforts to bring issues forward to the committee and work together to mitigate/resolve them. The location Safety Officer chairs the committee and is responsible for keeping detailed meeting minutes that reflect the reported hazards and other issues discussed and how they are addressed. All Division employees assist the safety committees within their respective disciplines and are encouraged to expeditiously report hazards and near misses. The Safety Officer will follow procedures to have hazards logged and addressed.

2.10.2 Safety Event Review Team (SERT)

The SERT focuses on operations safety events, accidents and incidents, both bus and rail, and identifying any trends associated with same, and working to find ways to reduce the number of and severity of accidents, hazards and so forth in revenue operations. This is accomplished by considering Operators and their safety records, the revenue vehicles and their subsystems, routing, stop locations, and more. The membership of the SERT works to find and identify possible corrective measures and then forward those recommended measures to the OSSRC for consideration and possible implementation. Those implemented corrective measures are then reviewed by the team on a periodic basis to ensure effectiveness.

The committee meets monthly and is comprised of 8 to 10 members. The Committee Membership includes representatives from Safety, Transit Police, ATU Local 85, Claims, and Operations. The SERT is chaired by the Deputy Chief Safety Officer, and he/she is responsible for documentation of meetings by keeping detailed minutes.

2.11 Safety Tasks

This section includes a discussion of PRT's SMS policies, including those used to achieve safety goals and objectives, manage safety risks, and promote safety. Section 2.20 thru 2.26.3 also describes the specific activities required to implement the SMS program, including: tasks performed by the System Safety Unit and safety-related tasks performed by other PRT departments. The section describes the process used to collect, maintain, analyze, and distribute safety data. The section describes the process used by PRT to develop, maintain, and ensure compliance with rules and procedures having a safety impact, including a description of the identification, implementation, and supervision of operating and maintenance rules and procedures and description of the process for documenting results and incorporating them into the safety risk management program. Section 2.25 includes a description of the process used for facilities and equipment safety inspections, including identification of the facilities and equipment subject to regular safety-related inspection and testing; techniques used to conduct inspections and testing; inspection schedules and procedures; and description of how results are entered into the hazard management process. The section describes PRT's maintenance audits and inspections program, including identification of the affected facilities and equipment, maintenance cycles, documentation required, and the process for integrating identified hazards into the hazard management process.

2.12 PRT SMS Policy Overview

The PRT Safety Management System Policy Statement establishes the SMS philosophy of the PRT, identifies the extent of commitment to safety, and designates and directs responsible individuals to carry out the PRT Public Transportation Agency Safety Plan.

The SMS Policy Statement with the commitment and enabling signature of the PRT's AE/CEO and approval of the Board provides the basis from which safety rules and applicable procedures are carried out and empowers the PRT's Safety Department to develop, implement, administer and maintain a comprehensive, integrated, and multimodal Public Transportation Agency Safety Plan, including auditing the PRT for compliance with the Plan. It also establishes that all employees and contractors are responsible to work in a safe manner, at all times. This includes identifying real and potential hazards and assisting to mitigate and resolve the hazard to a reasonable level.

2.13 Activities Required to Implement PTASP

To achieve its safety responsibilities as outlined in this document, the System Safety Unit takes a proactive approach by performing the following activities in unison with the respective operating or functional unit personnel:

- Conducts internal safety audits and physical inspections.
- Conducts safety inspections at South Hills Junction and South Hills Village and all bus garage locations.
- Conducts derailment investigations in conjunction with derailment committee.
- Conducts grade crossing accident investigations.
- Performs investigation of major accidents involving employees/equipment.
- Conducts investigation of miscellaneous safety complaints.
- Writes reports on significant incidents.
- Chairs safety committees at South Hills Junction/South Hills Village and all Bus Divisions.
- Performs follow-up to safety committee issues.
- Assists outside general liability insurer with property inspections.
- Accompanies PA Rail Transit Safety Review Program personnel on site visits.
- Trains maintenance employees on Employee Right to Know Act, and Hazardous (chemical) Awareness and Respiratory Protection Program and other safety-related programs.
- Trains Pittsburgh Fire Department and other emergency responders on LRV and Fire/Life Safety issues.
- Conducts training with Pittsburgh Bureau of Fire; Municipal Fire Departments; EMS; City, County and Federal SWAT Teams; and other emergency responders concerning emergency response to mass transit incidents (bus and rail).
- Assists with development, review and revisions of Standard Operating Procedures in conjunction with SOP Committee.
- Participates on Technical Advisory Committee for all bus/rail construction projects.
- Assists with development of bus/rail operating orders as needed.
- Conducts safety inspections during construction projects.
- Assists Division Directors with operational-related safety issues.
- Reviews and comments on any changes to safety elements within the rail system and busways.

- Conducts Roadway Worker Protection training
- Investigates employee lost time injuries as warranted.
- Tracks employee injury and vehicle accident data for statistical comparison, distributes monthly report.
- Participates on weekly Right-of-Way Allocation Committee meetings.
- Participates in development and implementation of system emergency drills.
- Conducts contractor training for entry into rights-of-way.
- Assists in the implementation of requirements relative to hazardous substances.
- Participates, when requested, on ad hoc committees to review/resolve transit issues.

2.13.1 Tasks Performed by Safety Unit

The System Safety Department, headed by the SMS Executive / Chief Safety Officer, reports to the AE/CEO for safety matters and issues; and the Chief Legal Officer for the day-to-day operating function. The System Safety Unit currently consists of the Chief Safety Officer, Deputy Chief Safety Officer, (4) Safety Officers – (2) Rail & (2) Bus, Manager of Occupational Safety and Health and an Associate Occupational Health, Safety and Training Officer. The Occupational Safety and Health Officers have system-wide responsibilities. Specific safety responsibilities by position are as listed below.

2.13.1.1 Chief Safety Officer

- Serves as the PRT SMS Executive
- Participates in formal meetings with the PRTSRP, Chief Executive Officer and Chief Legal Officer on safety issues.
- Serves as Chairman of the Operations Safety and Security Review Committee (OSSRC).
- Serves as an advisor to the Safety Event Review Team (SERT).
- Is notified of Employee Safety Reports (ESRs) including near miss incidents and events for review, tracking, and trending.
- Develops and implements safety policies, procedures, and programs.
- Develops and implements the Internal System Audit Program in compliance with State Oversight Requirements.
- Monitors safety performance measurement trends and communicates with the CEO, management staff, and employees on a regular basis.
- Supervises and oversees work of assigned system safety staff, conducts performance reviews with staff, and initiates appropriate actions related to such.
- Serves as PRT's main contact with PRTSRP and other agencies related to safety programs and procedures. Prepares case records, documents, and data required by such agencies.

- Investigates employee and vehicle accidents/incidents and injuries; works with Operations Training to develop programs to reduce accidents and injuries.
- Conducts inspections and research safety codes, standards, and regulations.
- Compiles and analyzes health and safety statistics; produces reports, records, documents, and manifests; accesses and updates database files.
- Coordinates through staff safety meetings at locations and attends meetings, conferences and group functions related to safety.
- Develops and conducts training sessions through staff relating to safety issues such as: Right to Know, Emergency Evacuation, Investigations, etc.
- Identifies health and safety concerns, analyzes reports and information, develops programs for accident/injury prevention, and submits recommendations to reduce frequency of accidents.
- Assists in claim investigations of work-related injuries or disabilities; assists in preparation of files for litigation.
- Develops and implements departmental budget and cost controls.
- Performs other job-related duties, as directed.

2.13.1.2 Deputy Chief Safety Officer

- Assists Division Directors in identification and resolution of employee and operations safety issues.
- Manage the various regulatory compliance issues; developing and implementing accident and injury prevention policy, procedures and programs; and supervising the Safety Officer Bus, Rail & Facilities.
- Primary role in investigating employee injuries, vehicle accidents and hazards within the required timeframe.
- Chairs the Safety Event Review Team (SERT) meetings.
- Employee Safety Reports (ESR) – is notified of ESRs including near miss incidents and events for investigation, review, tracking, and trending.
- Develops and implements system audits and facility inspections as defined by the Public Transportation Agency Safety Plan and/or the Chief Safety Officer.
- Coordinate division safety meetings; attends meetings, conferences and group functions related to safety.
- Develop, manage, and conduct as necessary safety & emergency management training for employees, contractors, and emergency responders.
- Maintains database to track safety/operational statistics and provide data to appropriate staff.
- Communicates safety performance trends to CSO and PRT staff.

- This job description is not meant to be all-inclusive. It reflects management's assignment of essential job functions, which are subject to change at any time.

2.13.1.3 Safety Officer

- Investigates employee and vehicle accidents, incidents, and injuries; assists in developing programs to reduce injuries.
- Conducts audits, inspections, and research safety codes, standards and regulations.
- Compiles and analyzes health and safety statistics; produces reports, records, documents, and manifests; accesses and updates database files.
- Communicates safety performance trends to CSO and PRT staff.
- Coordinates safety meetings at locations and attends meetings, conferences, and group functions related to safety.
- Conducts training sessions relating to safety issues such as: Right to Know, Emergency Evacuation, Safety Guidelines, Accident Investigations, etc.
- Identifies health and safety concerns, analyzes reports and information, develops programs for accident/injury prevention, and submits recommendations to reduce frequency of accidents.
- Assists in claim investigations of work-related injuries or disabilities; assists in preparation of files for litigation.
- Identifies safety and health concerns and issues and participates in the design and implementation of safety policies and procedures.
- Performs other job-related duties, as directed.

2.13.1.4 Manager of Occupational Health & Safety

- Develops and implements effective occupational safety and health goals, standards, policies and procedures for operations and administration staff.
- Communicates safety performance trends to CSO and PRT staff.
- Establishes and implements effective industrial hygiene and occupational policies and procedures for operating and maintenance functions.
- Evaluates and approves chemical products and hazardous substances tested, procured, or used by PRT personnel or on PRT property. Research references of hazardous materials and toxicology. Investigates complaints and evaluates field applications.
- Recommends, monitors, and evaluates PRT compliance activities with federal/state safety and health laws, hazardous waste management plans, and environmental standards and regulations.
- Establishes criteria for the selection, maintenance, and proper use of personal protective clothing and equipment.

- Participates in the development of training programs for Right-to-Know and Hazardous Materials Management, Safety Guidelines, and other regulatory mandated training.
- Oversees development and maintenance of industrial hygiene, occupational management databases and computer information systems.
- Performs other job-related duties, as assigned.

2.13.1.5 Associate OHS and Training Officer

- Develops, coordinates and conducts effective training relating to occupational safety and health programs.
- Assists Division Directors and safety staff in investigation and resolution of employee and patron complaints on issues related to OS&H.
- Assist with the development and implementation of effective occupational safety and health goals, standards, policies and procedures for operations and administration staff.
- Assist Manager of Occupational Health & Safety with implementing the necessary air-monitoring and employee sampling programs to effectively monitor exposures and employee health issues.
- Attend safety meetings; conferences, and group functions related to occupational safety and healthy and/or other related issues as required.
- Assist with the maintenance of occupational safety and health/environmental management databases and computer information systems. Evaluates and approves chemical products and hazardous substances tested, procured, or used by PRT personnel or on PRT property.

Table 5 - System Safety Unit and Operations Group Task Matrix

System Safety Tasks of System Safety Unit	RTSRP	Executive Staff	System Safety Unit	OSSRC	Safety Event Review Team	Division Safety Committee	Engineering/ Technical Support	Bus/Rail Operations Rev./Non-Rev. Vehicles	Legal & Corp. Services	Finance	HR/Comm./IT	Frequency D-Daily M-Monthly Q-Quarterly Y-Yearly AR-As Required
SMS Policy Statement	A	A	P	S	RC	NR	S	S	S	S	S	AR
Develop Multimodal PTASP	A	A	P	RC	RC	NR	RC	RC	RC	S	S	AR
Update PTASP	A	A	P	RC	A	NR	RC	RC	RC	S	S	Y/AR
Liaison with RTSRP	P	S	P	S	S	NR	S	S	P	S	S	AR

System Safety Tasks of System Safety Unit	RTSRP	Executive Staff	System Safety Unit	OSSRC	Safety Event Review Team	Division Safety Committee	Engineering/ Technical Support	Bus/Rail Operations Rev./Non-Rev. Vehicles	Legal & Corp. Services	Finance	HR/Comm./IT	Frequency D-Daily M-Monthly Q-Quarterly Y-Yearly AR-As Required
Employee Safety Reporting	P	p	S	P	P	P	S	P	S	S	S	AR
External Audits	P	RC	S	S	S	NR	S	S	S	S	S	AR
Conduct Internal Safety Audits	A	A	P	S	S	S	S	S	P	S	S	Y
Develop Emergency Response Plans	A	A	P	S	S	S	S	S	P	S	S	AR
Collect and classify all Traffic and Passenger Accidents/ Incidents	RC	S	P	S	S	NR	S	P	P	S	S	D
Maintain Database of Traffic and Passenger Accidents/ Incidents	RC	S	P	S	S	NR	S	P	P	S	S	D
Issue Accident/Incident Statistics and Reports	A	RC	P	S	RC	NR	S	S	P	S	S	M
Review Incident/ Accident Trends	RC	S	P	RC	P	S	S	P	P	S	S	M/AR
Conduct Traffic and Passenger Serious Accident/ Incident Investigations	A	A	P	S	S	NR	S	P	P	S	S	AR
Report required threshold Accidents/Incidents to Outside	A	A	P	S	RC	NR	S	S	S	S	NR	AR

System Safety Tasks of System Safety Unit	RTSRP	Executive Staff	System Safety Unit	OSSRC	Safety Event Review Team	Division Safety Committee	Engineering/ Technical Support	Bus/Rail Operations Rev./Non-Rev. Vehicles	Legal & Corp. Services	Finance	HR/Comm./IT	Frequency D-Daily M-Monthly Q-Quarterly Y-Yearly AR-As Required
Agencies (RTSRP, NTSB)												
Safety Risk Management	A	S	P	P	S	P	P	P	P	S	S	AR
Configuration Management	RC	S	S	S	RC	S	P	P	S	S	S	AR
Safety Certification	RC	S	P	P	RC	NR	P	S	S	S	S	AR
Design Reviews	RC	S	P	P	RC	RC	P	P	P	S	S	AR
Occupational Safety and Health Programs	RC	S	P	S	S	S	P	P	P	S	S	AR
Safety Communication	NR	S	P	P	S	S	RC	P	S	S	S	AR
Safety Training	RC	S	P	S	S	S	S	P	S	S	S	AR

A – Approval. The identified participant(s) is (are) responsible for approval of specified documentation

P – Primary Task Responsibility. The identified participant(s) is (are) responsible for the preparation of the specified documentation.

S – Secondary or Support Task Responsibility. The identified participant(s) is (are) to provide the necessary support to accomplish and document the task.

RC – Review and Comment Responsibility. The identified participant(s) may review and provide comment on the task or requirement.

NR – No role.

2.13.2 Safety Tasks Performed by Other PRT Divisions

To ensure that transit operations are conducted in the safest manner possible, all PRT personnel have been assigned safety responsibilities. In addition, within the PRT, each division/department/function provides distinct roles and carries out specific responsibilities to ensure the protection of passengers, employees, local responders, the community served, and PRT's property. PRT division/department's safety responsibilities and roles are summarized below.

2.13.2.1 Transportation - Operations

Road Operations

- Monitor bus/rail operations by means of field supervision and radio dispatching.
- Direct operators during emergencies and personnel as required by circumstances.
- Arrange removal of defective or damaged equipment.
- Investigate and mitigate reports of unsafe conditions.
- Respond to accident locations and initiate accident investigation process as required. Reporting cause to Division Directors and System Safety.
- Facilitate private carrier busway permits.
- Coordinate all special service activities (special events)
- Coordinate all student transportation contracts
- Monitor private carrier activity
- Training and qualifying new bus/rail operators on routes and equipment operation, defensive driving, pre-trip inspection, emergency procedures and injury and illness prevention.
- Performing re-training following bus/rail accident/incidents, occupational injuries, as warranted.
- Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards, and the use of Engineering or other departments for resolution.
- Takes appropriate actions to resolve identified hazards in a reasonable manner.
- Employee Safety Reporting, incidents, occurrences, near miss events.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

Bus Service Delivery

- Administer and monitor standardized programs, policies and procedures
- Ensure that Bus Operations staff adhere to established standard operating procedures, bulletins, rules and the processes set out in the PTASP.
- Monitor bus operations by means of field supervision and radio dispatching
- Coordinate daily activities of dispatchers, clerks and secretaries
- Implement and monitor PRT's Drug and Alcohol Program
- Ensure that Bus Service Delivery staff adheres to established standard operating procedures, bulletins, rules, and the processes set out in the PTASP.

- Encourage Employee Safety Reporting, incidents, occurrences, near miss events
- Take appropriate actions to resolve identified hazards in a timely manner
- Assist in the coordination of internal safety audits and participate in emergency response drills as required
- Oversee field maintenance programs and practices and ensure compliance with the PTASP
- Participate on safety committees as required
- Coordinate with Chief Safety Officer to incorporate PRT's SMS safety policy, rules and procedures in verbal instruction and hands-on training.
- Continuously identify any operating hazards that require formal implementation of the Hazard Resolution Procedure.
- Respond to accident location and initiate accident investigation process as required; report causes to Division Director.
- Ensure that service delivery schedules allow sufficient running time for safe operations at speed limits and adequate recovery time for bus operators.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

Bus/Rail Operations Department

- Continuously identify any operating hazards that require implementation of the Hazard Resolution Procedure
- Ensure that Bus Operations staff adheres to established standard operating procedures, bulletins, rules and processes set out in the PTASP through oversight of Division Dispatchers.
- Take appropriate action to resolve identified hazards in a reasonable manner
- Assist in coordination of external/internal safety audits and participating in emergency response exercises
- Coordinate safety-related activities of Bus Operations ensuring compliance with PTASP
- Assist in accident investigations/safety committees as required to identify and correct root causes
- Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards, and the use of Engineering or other departments for resolution.
- Takes appropriate actions to resolve identified hazards in a reasonable manner.
- Employee Safety Reporting, incidents, occurrences, near miss events.
- Continually communicate safety performance and promote safety work practices throughout unit.

- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.
- Operator Inspections-Bus

A daily inspection by the dispatcher of operators is required prior to pull-out. It will be the responsibility of the Division Assistant to the Director to periodically audit bus operator inspection practices, procedures, and documentation to verify whether department supervisory personnel are enforcing compliance with the requirements and maintaining proper documentation. Dispatcher inspection of operators includes:

- Adherence to scheduled reporting time & hours of service requirements
- Apparent impaired condition
- Proper uniform
- Proper equipment

Rail Service Delivery Department

- Administer and monitor standardized programs, policies and procedures
- Coordinate daily activities of rail operations supervisors, instructors, dispatchers, movement directors, off board fare collectors, and operators
- Implement and monitor PRT's Drug and Alcohol Program
- Ensure that Rail Service Delivery staff adheres to established standard operating procedures, bulletins, rules, and the processes set out in the PTASP.
- Take appropriate actions to resolve identified hazards in a timely manner
- Assist in the coordination of internal safety audits and participate in emergency response drills as required
- Provide oversight and monitor training of new rail operators on routes and equipment operation, pre-trip inspection, emergency procedures and injury and illness prevention
- Maintain safety records for Rail Service Delivery employees relative to accidents and rule violations
- Require re-training following accidents, changes to system, occupational injuries as warranted
- Coordinate with Chief Safety Officer/Deputy Chief Safety Officer to incorporate PRT's SMS safety policy, rules and procedures in verbal instruction and hands-on training
- Continuously identify any operating hazards that require implementation of the Hazard Resolution Procedure
- Ensure that Rail Service Delivery staff adheres to established standard operating procedures, bulletins, rules and processes set out in the PTASP

- Coordinate safety-related activities of Rail Operations staff and ensure compliance with the PTASP
- Encourage Employee Safety Reporting, incidents, occurrences, near miss events
- Conduct QA/QC reviews and monitor/trend performance on continuous basis, in collaboration with System Safety and Internal Audit
- Assign staff as appropriate to participate in a meaningful way on safety-related committees. Provide data and other assistance as required.
- Coordinate with Chief Safety Officer/Deputy Chief Safety Officer in the development and implementation of risk reduction measures associated with the operation of PRT's rail revenue vehicles.
- Coordinate communications concerns relative to joint missions and training exercises with local municipalities and the City.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.
- Operator Inspections-Rail

Daily inspections by the dispatcher of operators are required prior to pull-out. It is the responsibility of the Assistant to the Director of Rail Service Delivery to periodically audit rail operator inspection practices, procedures, and documentation to verify whether department supervisory personnel are enforcing compliance with the requirements and maintaining proper documentation. Dispatcher inspection of operators includes:

- Adherence to scheduled reporting time & hours of service requirements
- Apparent impaired condition
- Proper uniform
- Proper equipment

Facilities and Rail Maintenance

- **Facilities**
 - Ensure safety of PRT buildings including mechanical and electrical equipment, bus shelters, stops and stations.
 - Ensuring that bus and rail stations and stops meet applicable safety requirements and PRT practices.
 - Ensure necessary procedures are in place and implemented for conducting maintenance activities in a safe and effective manner for all.
 - Maintain PRT facilities and provide for enforcement of required safety procedures for all maintenance activities.
 - Assist System Safety Department in conducting safety-fire inspections and correcting any identified deficiencies.

- Assisting as necessary in accident investigations.
 - Assist System Safety department with internal audit process as required.
 - Maintain PRT facilities and rail systems. Provide for enforcement of required safety procedures for all maintenance activities.
 - Document and maintain accurate records of inspections, maintenance work, accident-related activities and emergency responses.
 - Assisting as necessary in accident investigations, testing and start-up activities as appropriate.
 - Takes appropriate actions to resolve identified hazards in a reasonable manner.
 - Encourage Employee Safety Reporting, incidents, occurrences, near miss events.
 - Conduct QA/QC reviews and monitor/trend performance on continuous basis, in collaboration with System Safety and Internal Audit.
 - Develop preventive maintenance procedures with input from employees who perform work.
 - Ensure that rail system work is coordinated with Right-of-Way Allocation Committee to complete work safely and efficiently without adversely affecting revenue service.
 - Ensure busways, rail rights of way, inclines, tunnels, bridges, parking lots and structures are maintained safely and efficiently.
 - Ensure compliance with Configuration Management Procedures as they relate to system signals, switches & other safety critical systems.
 - Continually communicate safety performance and promote safety work practices throughout unit.
 - Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.
- **LRT Systems and Power**
 - Ensure signals and switches are maintained safely and efficiently.
 - Ensure substations and catenary is maintained safely and efficiently.
 - Maintain PRT radios and fareboxes.
 - Document and maintain accurate records of inspections, maintenance work, accident-related activities and emergency responses.
 - Ensure necessary procedures are in place and implemented for conducting maintenance activities in a safe and effective manner for all.
 - Maintain PRT facilities and provide for enforcement of required safety procedures for all maintenance activities.
 - Assisting as necessary in accident investigations.
 - Assist System Safety department with internal audit process as required.
 - Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards.
 - Takes appropriate actions to resolve identified hazards in a reasonable manner.

- Encourage Employee Safety Reporting, incidents, occurrences, near miss events.
 - Conduct QA/QC reviews and monitor/trend performance on continuous basis, in collaboration with System Safety and Internal Audit.
 - Develop preventive maintenance procedures with input from employees who perform work.
 - Ensure that rail system work is coordinated with Right-of-Way Allocation Committee to complete work safely and efficiently without adversely affecting revenue service.
 - Provide for enforcement of required safety procedures for all maintenance activities.
 - Ensure compliance with Configuration Management Procedures as they relate to system signals, switches and other safety critical systems.
 - Continually communicate safety performance and promote safety work practices throughout unit.
 - Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.
- **Track & Way**
 - Assist System Safety Department in conducting safety-fire inspections and correcting any identified safety deficiencies.
 - Ensure busways, rail rights of way, inclines, tunnels, bridges, parking lots and structures are maintained safely and efficiently.
 - Ensure that rail system work is coordinated within Facilities and with Right-of-Way Allocation Committee to complete work safely and efficiently without adversely affecting revenue service.
 - Develop preventive maintenance procedures with input from employees who perform the work.
 - Monitor the performance of preventive maintenance efforts.
 - Document and maintain accurate records of inspections, maintenance work, accident-related activities, and emergency responses.
 - Ensure necessary procedures are in place and implemented for conducting maintenance activities in a safe and effective manner for all.
 - Maintain PRT facilities and rail systems. Provide for enforcement of required safety procedures for all maintenance activities.
 - Serve as liaison with various municipalities and other external agencies for hazard resolutions involving street operations.
 - Assist as necessary in accident investigations.
 - Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards.
 - Takes appropriate actions to resolve identified hazards in a reasonable manner.
 - Encourage Employee Safety Reporting, incidents, occurrences, near miss events.

- Conduct QA/QC reviews and monitor/trend performance on continuous basis, in collaboration with System Safety and Internal Audit.
- Develop preventive maintenance procedures with input from employees who perform work.
- Ensure that rail system work is coordinated with Right-of-Way Allocation Committee to complete work safely and efficiently without adversely affecting revenue service.
- Provide for enforcement of required safety procedures for all maintenance activities.
- Ensure compliance with Configuration Management Procedures as they relate to system signals, switches and other safety critical systems.
- Schedule and coordinate preventive maintenance activities.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

2.13.2.2 Transportation - Maintenance

This division consists of Bus, LRV and non-revenue vehicles maintenance departments.

Railcar Maintenance

- Assure that the rail car fleet is properly maintained and available in safe operating condition according to PRT's procedures.
- Provide necessary mechanisms for reporting defects and hazardous conditions.
- Coordinate with the Chief Safety Officer/Deputy Chief Safety Officer on SMS safety requirements.
- Administer and monitor standardized programs, policies, and procedures.
- Administer safety programs for department employees.
- Implementing and monitoring PRT's Drug and Alcohol Program.
- Monitor the collection and disposal of waste (e.g., oils, clarified wastewater sludge) to affect safe handling and minimize employee and environmental exposure to potentially hazardous products and materials.
- Take appropriate action to resolve reported or otherwise identified hazards in a reasonable manner. As appropriate, coordinate the development and testing of engineering solutions as a means of addressing vehicle related hazards.
- Coordinate with the Chief Safety Officer/Deputy Chief Safety Officer in the development and implementation of safety risk reduction measures associated with the operation and maintenance of PRT's rail revenue vehicles.

- Monitor procurement practices to ensure that safety is not compromised in replacing parts. Monitor man-machine interfaces.
- Ensure that replacement equipment meets safety requirements prior to acceptance. Examine equipment and systems to explore the potential for increased efficiencies and improvements in user and fire safety as well as in performance
- Where applicable, participates in the development of technical equipment specifications and procedures that address the safety requirements of regulatory agencies and PRT. Ensure that replacement equipment meets safety requirements prior to acceptance. Examine equipment and systems to explore the potential for increased efficiencies and improvements in user and fire safety as well as in performance.
- Assure that the communications electronic systems are properly maintained and operational on a daily basis. Ensure that equipment is in compliance with manufacturer specifications, federal requirements, and directives.
- Ensure all emergency communications electronic equipment is in compliance with organizational requirements along with the associated guidelines.
- Encourage Employee Safety Reporting, incidents, occurrences, near miss events
- Coordinate communications concerns relative to joint missions and training exercises with local municipalities and the City of Pittsburgh.
- Monitor compliance of organizational policies and procedures.
- Ensure that applicable safety practices and procedures are adhered to relative to the communications and electronic service industry.
- Ensure compliance with Configuration Management Procedures as they relate to vehicle maintenance and design.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Assist System Safety Unit in conducting safety/fire inspections and correcting any identified safety deficiencies
- Document and maintain accurate records of inspections, maintenance work, accident-related activities and emergency responses
- Monitor the performance of preventive maintenance efforts
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

Bus Maintenance

- Ensure safety of bus garages including mechanical and electrical equipment
- Ensure that programs, retrofits, major repairs and maintenance practices are performed safely and monitored for safety-related issues.
- Ensure that functions comply with the PTASP.

- Train all new mechanics and technicians to safely and effectively inspect, maintain and repair PRT's fleet
- Train maintenance staff in emergency/safety procedures and injury and illness prevention as appropriate
- Monitoring body and paint, mechanical repairs and component rebuild activities for quality
- Coordinating and monitoring the Vehicle Improvement program, and all off-property repairs
- Takes appropriate actions to resolve identified hazards in a reasonable manner.
- Encourage Employee Safety Reporting, incidents, occurrences, near miss events
- Oversee and coordinate the Bus Fleet Quality Assurance Program.
- Assist in accident investigation process as required.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

Non-Revenue Vehicles

- Document and maintain accurate records of inspections, maintenance work, accident-related activities and emergency responses.
- Perform preventive and corrective maintenance of PRT's non-revenue fleet.
- Perform body and mechanical repairs, excluding major hydraulic and high-rail components on all of the non-revenue vehicles.
- Schedule and coordinate preventive maintenance activities.
- Maintain vehicle records.
- Develop preventive maintenance procedures with input from employees who perform the work.
- Monitor the performance of preventive maintenance efforts.
- Document and maintain accurate records of inspections, maintenance work, accident-related activities, and emergency responses.
- Ensure necessary procedures are in place and implemented for conducting maintenance activities in a safe and effective manner for all.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

2.13.2.3 Development, Engineering and Planning Division

The Planning and Development division includes Engineering, Technical Support, Capital Programs, Service Development and Planning.

Technical Support and Capital Programs

- Ensure that equipment purchased by PRT meets safety requirements and that design requirements have been coordinated with all appropriate departments.
- Administer warranty programs.
- Coordinate major equipment rebuild, repair, and retrofits.
- Perform inspection and testing activities necessary to ensure that equipment, supplies, and operations result in the desired level of safety.
- Establish and maintain current drawings for PRT facilities and systems.
- Analyze equipment failures and identifies trends.
- Document Capital equipment and facility modifications and informs affected staff of these modifications.
- Participate in derailment committee, conduct investigations, developing findings and recommendations.
- Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards, and the use of Engineering or other departments for resolution.
- Assist in accident investigations when required. Encourage Employee Safety Reporting, incidents, occurrences, near miss events
- Administer/monitor construction contracts to ensure that the contractor's procedures conform with current PennDOT and OSHA regulations and that the results are safe for PRT and/or public use.
- Monitor the installation of facilities, systems, and equipment to ensure compliance with contractual requirements and procedures.
- Technical specification writing.
- Coordinate communications concerns relative to joint missions and training exercises with local municipalities and the City.
- Approval of any new, upgraded or modification of communications or electronic systems.
- Environmental impact studies.
- Emergency response to hazardous waste, chemical spills and/or other issues required by regulation.
- Ensure compliance with configuration Management Procedures as they relate to safety critical systems.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

Service Development & Planning

- Ensure that service delivery schedules allow sufficient running time for safe operations at speed limits and adequate recovery time for bus/rail operators.
- Investigate operator complaints of insufficient running time.
- Develop work runs and schedule relief in accordance with collective bargaining agreements and regulatory requirements such as hours of service.
- Assist with development of marketing tools to increase the transit safety awareness of riders and others coming in contact with PRT.
- Maintaining a liaison with the media following accidents and emergencies involving PRT.
- Assist with development and implementation of community outreach programs via print and electronic media promoting the safe use of PRT services.
- Ensure operational safety of stops, shelters, and route design and layover/recovery areas.
- Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards, and the use of Engineering or other departments for resolution.
- Takes appropriate actions to resolve identified hazards in a reasonable manner.
- Employee Safety Reporting, incidents, occurrences, near miss events.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

2.13.2.4 Strategy Division

The Strategy Division includes Controller, Grants and Capital Programs, Purchasing, Financial Planning and Budgets.

- Facilitate achievement of PTASP objectives through preparation and control of PRT's budget and staffing level recommendations.
- Ensure necessary funding for safety programs/projects.
- Ensure necessary programs are in place to monitor and track Transit Security Grants and other Homeland Security Funds.
- Ensure that the procurement process complies with established procedures for evaluating materials and products for use by PRT.
- Ensure that all contracts comply with PRT's PTASP and all federal, state and local fire/safety regulations.

- Include safety requirements in contracts such that contractors must meet all applicable state, federal, and local regulations as well as PRT's requirements.
- Develop and maintain a list of hazardous materials and equipment.
- Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards, and the use of Engineering or other departments for resolution.
- Takes appropriate actions to resolve identified hazards in a reasonable manner.
- Encourage Employee Safety Reporting, incidents, occurrences, near miss events
- Enforce safety procedures related to hazardous substance acquisition, handling, labeling, storage, disposal, and record keeping.
- Stock quality parts.
- Specification and quality assurance of parts and materials.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

2.13.2.5 Human Resources Division

- Develop position descriptions that address safety-related restrictions and requirements.
- Negotiating, interpreting and administering various collective bargaining agreements, and providing direction to line management in all matters concerning labor and employee relations.
- Oversight of grievance procedures and arbitrations.
- Ensure PRT's medical provider adheres to the DOT medical guidelines for safety sensitive positions.
- Develop and administer medical standards for specific job positions, as warranted.
- Ensure that successful candidates for positions are capable of safely performing the tasks of these positions on a repetitive basis.
- Administer the application of PRT's employee discipline policy.
- Provide oversight and follow-up of site visits by health professionals (e.g., in connection with PRT's drug and alcohol testing program).
- Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards, and the use of Engineering or other departments for resolution.
- Takes appropriate actions to resolve identified hazards in a reasonable manner.
- Encourage Employee Safety Reporting, incidents, occurrences, near miss events.

- Maintain complete and current documentation in personnel files.
- Assist bus and rail maintenance trainers and instructors in training program development.
- Oversight of all training databases through PeopleSoft and/or other programs.
- Continually communicate safety performance and promote safety work practices throughout unit.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

2.13.2.6 Communications Division

The Communications Division with its six departments serves an important role in Safety Management Systems through the Safety Promotion component.

PUBLIC RELATIONS - Public relations handles media relations, employee communication and stakeholder communication. A staff member is on call 24/7 to assist the media with news coverage regarding PRT. We work with communities and news media during emergency incidents to provide them with updates, and work closely with Operations, Customer Service, Safety and Police to keep customers informed about severe weather effects, safety events, and other incidents.

CUSTOMER SERVICE staff is available for questions, and to listen to safety comments and concerns. Messaging is received by telephone, social media, and email.

COMMUNITY OUTREACH is a comprehensive, coordinated program that not only promotes the services and programs of PRT, but encourages and garners meaningful public input which is essential to the safety success of the organization.

MARKETING plays an important role in communicating PRT's mission and strategic initiatives, including safety, both internally and externally. The department oversees a variety of tasks including writing/producing/designing promotional and awareness materials, coordinating special events, conducting market research, promoting new product and service launches.

- Facilitate achievement of PTASP Safety Communications and Safety Promotion objectives.
- Foster the public sense that PRT is a safety minded organization with a caring, professional, skilled staff.
- Promote and foster a reputation of being responsive to the safety concerns of the riding and non-riding public.

- Ensure safety related concerns of customers and the public are provided to both operations and the safety department.
- Ensure necessary funding for safety messaging and promotion throughout PRT, both for employees and customers.
- Assist Safety Department and other divisions in safety promotion and performance throughout PRT.
- Assist the Safety Department as requested by promoting safe work practices, safe riding, safe operations and more through a variety of means including Crossroads, social media, internal, and external communications.
- Continually promote safe work practices and promote safety work practices within the Division.
- Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards, and the use of Engineering or other departments for resolution.
- Takes appropriate actions to resolve identified hazards in a reasonable manner.
- Encourage Employee Safety Reporting, incidents, occurrences, near miss events.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

EXTERNAL RELATIONS is responsible for communicating on a wide variety of matters with the public officials, and specifically with elected officials at the Federal, State and Local levels. This information could include safety related material and promotions.

ADVERTISING is responsible for selling advertising to third parties interested in displaying their company information on or in PRT owned spaces.

2.13.2.7 Information Technology Division

The Information and Technology Division with its four departments serves an important role in Safety Management Systems through the Safety Promotion and Assurance components.

Enterprise Applications - The Enterprise Application's group's primary responsibility is to maintain the PRT's numerous software applications, evaluate third party solutions and develop new applications as needed.

Infrastructure - The Infrastructure group's primary responsibility is to maintain the PRT's computer hardware that consists of telecommunications, networking, PC's and servers and specialized software for daily operations.

Customer Engagement – The Customer Engagement team ensures that internal

customers have the tools and adequate response times for any technology needs, requests and issues.

Transportation Technology - The Transportation Technology department is responsible for creating and maintaining Intelligent Transportation Systems, including fate systems, that make PRT bus and rail more convenient and safer for everyone.

- Facilitate achievement of PTASP Safety Communications and Safety Promotion objectives.
- Assist Safety Department with new and innovative means to collect and evaluate safety data from source such as accidents, incidents, near misses, employee reporting and customer feedback.
- Assist Safety Department and other divisions in safety promotion and performance throughout PRT.
- Assist Safety Department in developing real-time dashboards to be displayed on Crossroads to better inform PRT employees on safety metrics and trends.
- Assist the Safety Department as requested by promoting safe work practices, safe riding, safe operations and more through a variety of means including Crossroads, social media, internal, and external communications.
- Identify, report, and mitigate all hazards. Includes operational hazards, vehicle hazards, and the use of Engineering or other departments for resolution.
- Takes appropriate actions to resolve identified hazards in a reasonable manner.
- Encourage Employee Safety Reporting, incidents, occurrences, near miss events.
- Continually promote safe work practices and promote safety work practices within the Division.
- Works to fulfill the scope and purpose of this PTASP as defined in section 2.2.

2.14 Rules Compliance/Procedures Review

2.14.1 Operating and Maintenance Rules and Procedures

Operational rules and procedures are contained in the Standard Operating Procedures (SOPs), System Rules, and Operations Manuals. Facilities rules and procedures are contained in the Maintenance Inspection and Testing Procedures (MITP), Facilities and Rail Maintenance Plan and the manufacturers manual. Select maintenance Procedures are also in the System Safety Guidelines. These publications cover all rules and procedures that are necessary to operate a safe and efficient bus and rail system.

2.14.1.1 Rail System Rules

The PRT Rail System Rule Book is a written document that contains rules governing the conduct and performance of PRT employees. The Rule Book is reviewed on an as needed basis by the Procedures and Rules Committee who reports any proposed additions or revisions to the Chief Operating Officer(s) for approval. The Chief Operating Officer(s) forwards recommended revisions to the OSSRC for concurrence. Upon approval of the OSSRC, the rules contained therein are added to, modified, or deleted as required by operating conditions and changes in personnel policy. Rail System Rule Books are distributed on an accountable basis.

2.14.1.2 Bus Standard Operating Procedures

PRT Bus Standard Operating Procedures (SOPs) are written documents that describe how to perform specific duties or actions and convey information about various elements of the PRT system. A committee chaired by the Chief Operating Officer(s) or his/her designee per procedure is to meet as needed for the purpose of evaluating all current and proposed SOPs. The Procedures and Rules Committee:

- Reviews and evaluates existing SOPs and make necessary revisions
- Reviews and evaluates draft SOPs and make necessary revisions
- Research and develop SOPs recommended by Chief Operating Officer(s) or designee

Completed SOPs are forwarded by the Procedures and Rules Committee to the Chief Operating Officer(s) and OSSRC for review and final approval.

2.14.1.3 Rail System Standard Operating Procedures

PRT Rail Standard Operating Procedures (SOPs) are written documents that describe how to perform specific duties or actions and convey information about various elements of the PRT system. A committee, chaired by the Director of Rail Service Delivery, convenes on an as needed basis for the purpose of evaluating all current and proposed SOPs. The Procedures and Rules Committee:

- Reviews and evaluates existing SOPs and make necessary revisions
- Reviews and evaluates draft SOPs and make necessary revisions
- Research and develop SOPs recommended by the Chief Operating Officer(s) or designee

Completed SOPs are forwarded by the Procedures and Rules Committee to the Chief Operating Officer(s) for review and final approval. A draft SOP can be originated and submitted for consideration by any PRT rail system employee.

New rail operators receiving an SOP book are required to sign, date, and return a form indicating receipt. All SOP's and Rulebook are available on PRT's Crossroads intranet site for access 24/7. All updated SOPs once approved and signed are placed onto the Crossroads network site.

2.14.1.4 Bulletins, Notices, and Orders

Urgent changes can be made by Department Heads having control over the specific rules or procedures by means of bulletins, notices, or orders. After implementation, they must be submitted for approval by the Department Head to the Chief Operating Officer(s) or his/her designee. Whenever updated, Standard Operating Procedures, bulletins, department notices, and memoranda will be reissued. This process is further defined in the Rail and Bus Standard Operating Procedures.

2.14.2 Techniques for Employee Compliance

2.14.2.1 Operations Personnel

Daily inspections (by the dispatcher) of operators are required prior to pull-out. Road Operations Supervisors enforce rules and procedures in the field by observing, correcting, and documenting safety-related behaviors and activities of operators and system elements. Daily and weekly operational checks are made in the field that include but are not limited to:

- Radar speed checks (yard, grade crossings, and system)
- Observation checks for time and load
- General observations of vehicles, signals, and system for deficiencies; and
- Follow up on patron complaints

Periodic spot checks are made as a result of an accident, request, and/or at random. System Safety may conduct random checks that include but are not limited to:

- General vehicle operation
- Attention to duty
- Signal compliance
- Platform and door operation
- Work zone protection
- RTSRP operations reviews

2.14.2.2 Maintenance Personnel

Vehicle Maintenance Supervisors enforce rules and procedures by observing and monitoring employee performance in bus and rail shops and yards. Facilities and Rail Maintenance Supervisors enforce rules and procedures by observing and monitoring employee and contractor performance on the rail system and at worksites. Rules and procedures monitored and observed for compliance include but are not limited to:

- General safety
- Proper use of tools, equipment and machinery
- Proper use of personal protective equipment
- Right-of-way safety
- Fire safety
- Material handling and storage
- Work zone procedures

Preventive maintenance activities are continuously monitored by maintenance managers and supervisors. Inspection tasks are periodically updated to reflect fleet needs and enhance operational efficiency and safety.

2.14.3 Techniques for Supervisory Compliance

2.14.3.1 Operations Supervisors

It is the responsibility of the Assistant to Directors of Service Delivery and the Director of Rail Service Delivery or his/her designee to periodically monitor operator procedures and rules violations, inspection practices, and documentation to verify whether department supervisory personnel are enforcing compliance with the requirements and maintaining proper documentation.

2.14.3.2 Maintenance Supervisors

It is the responsibility of the Managers of Bus Maintenance to periodically monitor bus maintenance personnel rules and procedures violations, and documentation to verify whether department supervisory personnel are enforcing compliance with requirements and maintaining proper documentation.

It is the responsibility of the Director of Rail Service Delivery to periodically monitor facilities and rail maintenance personnel rules and procedures violations, and documentation to verify whether department supervisory personnel are enforcing compliance with requirements and maintaining proper documentation.

2.14.4 Compliance Documentation

2.14.4.1 Observation Results

Road Operations, Vehicle Maintenance Supervision, and Facilities and Rail Supervisors are primarily responsible for documenting procedures and rules violations observed. Violation of rules and procedures are covered and enforceable under the Performance Code. When observed, violation(s) are noted on the Occurrence Report. Records of rules and procedures violations are maintained by Bus Service Delivery, Bus Main Shop, Rail Service Delivery and Rail and Facilities Maintenance.

2.14.4.2 Hazard Management Process Coordination

The OSSRC reviews revisions to rules and procedures periodically and when an accident or incident indicates a possible rule or procedural contribution. Reviews typically include instructional materials, emergency procedures, rules and operating procedures. The review process involves identifying operational hazards and determining whether rules and procedures adequately control the exposure to a particular hazard. The effect of the rule or procedure on the safety of other operations is also examined. In addition, trend analysis may be performed on rules and procedures operational checks and violations as a source of data in the Hazard Management Process, and also to determine revisions needed to training and other safety-related programs.

2.15 Facilities and Equipment Safety Inspections

2.15.1 Facilities and Equipment Subject to Inspection

An essential element of the PRT SMS Program is regular inspection of all rail and bus system facilities and equipment that can affect safe operation.

Table 6 - Facility Inspections

Facility	Typical Items Inspected/Tested
South Hills Village Rail Vehicle Maintenance Building	Offices and material storage area, communication systems, compressed air and lubrication systems, power distribution systems, heating and cooling systems, floors, walls, doors, stairways, signs, overhead doors, rail car hoists and cranes, pits, power systems, car wash units, eye wash stations, fire extinguishers and alarms, sprinkler systems, hazardous material storage, and cutting/welding equipment.

Facility	Typical Items Inspected/Tested
South Hills Rail Transportation Building (Offices, Instruction, RTO, and BTO)	Fire extinguishers and alarms, sprinkler systems, housekeeping, electrical systems, communication systems, heating and cooling systems, first aid supplies, entrances and exits, stairways, and lighting
South Hills Rail Vehicle Storage Yard	Fire system, lights, wooden walkways, fences and gates, and electrical system
Bus Garages (Ross, Collier, West Mifflin, and East Liberty)	Fuel islands, yards, transportation offices, sprinkler systems, fire extinguishers and alarms, communication systems, vehicle washing equipment, fences and gates, cranes, vehicle lifts, lubrication systems, power distribution systems, trash collection systems, compressed air systems, lights, heating and air conditioning systems, water and sewer systems, pollution control systems, eyewash stations, walls, roof, entrances/exits and emergency exit doors, signs, stairways, overhead doors, and security systems
Manchester Bus Overhaul Shop	Offices and parts storerooms, communication systems, heating and cooling systems, high pressure boiler room, machine shop, compressed air and lubrication system, hoists, cranes, vehicle lifts, eye wash units, fire suppression equipment, hazardous material storage, and cutting/welding equipment, floors, walls, doors, stairways, signs, overhead doors
Manchester Office Complex	Fire safety equipment, communication system, housekeeping, electrical systems, heating and cooling systems, first aid supplies, entrances/exits and emergency exits, panic hardware, stairways, fences, and lighting
Busways and Busway Stations <ul style="list-style-type: none"> • South Busway • East Busway • West Busway 	Signaling, pavement markings, shelters, crosswalks, lighting, signs, trash receptacles, and benches
Bus Layovers and Loops	Pavement and pavement markings, signs, operator washroom and lighting
Rail Stations and Stops	Lights, railings and security barriers, trash cans and signs
Subway and Subway Stations	Fire suppression system, ventilation systems, fire extinguishers, area lighting and exit signage, blue lights, worker safety strobe lights, general

Facility	Typical Items Inspected/Tested
	passageway items, elevators, chemical sensors and escalators
South Hills Junction Facilities Maintenance Buildings (4)	Offices and material storage areas compressed air and lubrication systems, power distribution systems, heating and cooling systems, floors, walls, doors, stairways, signs, overhead doors, car hoists and cranes, pits, power systems, car wash units, eye wash units, fire suppression equipment, hazardous material storage and cutting/welding equipment.
Park-N-Ride Lots	Marked pavement, lighting, informational signage, sidewalks and fencing
Mount Lebanon, Mount Washington, Berry Street, Wabash & Northshore Connector Tunnels	Fire suppression systems, ventilation systems, fire extinguishers, sump pumps, area lighting and exit signage, blue lights, and general passage items. In addition, PRT's Tunnel Inspection Program establishes structural inspections to be conducted of each tunnel either by PRT Engineering or consultants every 48 months
Monongahela Incline	Wheel assemblies, brakes, shafts, motors and fans, trackway, pulley assemblies, safety/haul cables, fire extinguishers, cars and stations

Table 7 - Equipment Inspections

Equipment	Typical Items Inspected/Tested
Signal System	Signals, switches, crossovers, automatic trip stops, electric switch machines, grade crossing warning systems, and snow switch melters
Traction Power System	Substation, transformers, breakers, overhead contact wire, support poles, and mast arms.
Track	Rail, rail joints, ballast, ties, special work, track profile, rail fixation, sewer drains, crossings and stops, rail surface defects, hillside/roadbed, and tree/vegetation
Bridges	PRT-owned bridges are inspected by a consultant on a two-year cycle using PennDOT guidelines.
Rail Vehicles	Interior and exterior equipment, operator cab and controls, passenger doors, communication systems, friction and disc braking, HVAC, lighting, propulsion system, roof equipment, underfloor equipment, car body, and couplers

Equipment	Typical Items Inspected/Tested
Buses	Tires and wheels, directional signals, lights, wipers, glazing, service and parking brakes, lifts, steering system, handrails and stanchions, doors and interlocks, warning devices, horn, suspension system, emergency exits, and step wells and flooring
Non-Revenue Service Vehicles	Cars and light trucks, medium trucks, heavy trucks, emergency generators, forklifts, tow tractors, riding floor sweepers and scrubbers, manlifts, and hi-rail vehicles

2.15.2 Inspection Techniques

Facilities and equipment inspections are practiced extensively to avoid in-service failures and subsequent in-service delays. Inspections are documented on Visual/Functional Checklists that specifies item/function inspected, location, date, reference source, inspection frequency, work order number, crew/individual performing inspection, and inspector's remarks/comments.

Critical items/conditions disclosed during inspection are repaired immediately. Non-critical items/conditions are cycled through work order procedure. Inspection notes recorded on Visual/Functional Checklists are given to Preventive Maintenance Administrator for review and filing. The Preventive Maintenance Administration issues Visual/Functional Checklists containing written defects to crew for immediate rectification of problem. When reports of defects or problems are reported from other sources, they are responded to and handled in this manner also.

Safety Officers supplement departmental facilities inspections with formal evaluations of facility equipment as well as preparing, posting and keeping current site maps which show the location of equipment, entrances, exits, etc.

2.15.3 Inspection Schedules and Procedures

Facilities Maintenance personnel conducts equipment inspections on a periodic basis according to preventive maintenance schedules (e.g., HVAC, elevators). Inspections are performed utilizing established PRT Standard Operating Procedures and Checklists that include:

- Automatic Trip Stops Visual/Functional Inspection
- Substation Battery Maintenance Procedure
- Catenary Visual/Functional Inspections
- Grade Crossing Warning System Inspection
- Hi-Rail Conversion Unit Maintenance & Inspection
- Substation Control Visual/Functional Inspection

- Substation FBK-H Feeder Breaker Maintenance Inspection
- Substation Good Housekeeping Procedure
- Signal Indicator Visual/Functional Inspection
- Rail Switch Visual/Functional Inspection
- Switch Machine – Electric Visual/Functional Inspection

The frequency of equipment inspections depends upon the level of hazard associated with operation, industry standards, and contractor supplier recommendations. Refer to Table 9 for frequency of inspections. In addition, facilities and equipment are also inspected by departments and/or Safety Officers as a result of accident reports. Signal defects such as a burnt-out aspect reported by rail operators are checked and repaired promptly. Additional details can be found in the LRT/Rail Systems/Facilities/Operations plan included by reference and maintained by the Director of Rail Service Delivery.

The Facilities Department has a number of audit checks in place to ensure that inspections are being properly conducted and completed. These audit checks include:

- Performance indicators track the number of MITPs completed against the number scheduled. The work order system tracks Way, Non-Revenue, Power and Signals. These performance indicators are reviewed monthly by the Director of Rail Service Delivery. Facilities Managers and Supervisors are held accountable for performances.
- Specific equipment is thoroughly checked through the Preventive Maintenance Program procedures.

2.15.4 Inspection Documentation

Most inspections are documented on preprinted checklists, filled out at time of inspection to assure a consistent level of monitoring and general maintenance. As of this revision, PRT utilizes two different work order systems. The first is the existing Access program which is in the process of being phased out. The second is a newly implemented FIIX system that is beginning to be used by departments at SHJ.

2.15.4.1 Results

The checklists and written reports are issued following the inspections and all action items are put into the work order system.

2.15.4.2 Coordination with Hazard Management Process

Safety critical equipment that does not meet established requirements is removed from service and/or tagged or locked-out. Vehicles or equipment that is involved in an accident are inspected by qualified personnel prior to being placed back into service.

Identified hazardous conditions disclosed in the inspection of facilities and equipment is formally submitted to the Division Director for review and corrective action. Division Directors are responsible for formally notifying System Safety upon disclosure of a hazardous situation/condition. Unresolved hazardous conditions may be submitted to the OSSRC for review, analysis, and resolution.

2.16 Maintenance Audits/Inspections Program

Table 8 - Affected Facilities and Equipment

Facility/Equipment	Programs
Rail Vehicles	Preventive (scheduled) maintenance Corrective (unscheduled) maintenance Routine cleaning and servicing Major campaigns to correct component failure Mid-life overhaul
Wayside Signals	Grade crossings Rail switches Automatic trip stops (ATS) Snow melters Vital relays
Traction Power	Inspection Preventive Maintenance Corrective Maintenance
Track	Track walker inspections Contract rail testing
Buses	Preventive maintenance Corrective maintenance Diagnostic Routine cleaning and servicing Wheelchair lifts

2.16.1 Maintenance Cycles

PRT signal maintenance is guided by Association of American Railroad Standards (AAR). In addition to following PRT Standard Operating Procedures, the Facilities and Rail Maintenance Department uses the widely accepted rail industry standards of the American Railway Engineers and Maintenance-of-Way Association (AREMA) to specify track materials and to establish tolerances for track construction. The PRT is required to adhere to PennDOT State Rail Standards.

With the opening of the Stage II Overbrook Line, the Pittsburgh Regional Transit reviewed the "Track Safety Standards" dated 1997 for applicability to both the new

Stage II track and existing track work on Stage I and determined to adopt the approved American Public Transportation Association (APTA) "Standard for Inspection and Maintenance of Fixed Structure – Transit Standards Executive Committee. These standards cover procedures for the periodic inspection and maintenance of track on transit properties.

The standard was adopted with certain exceptions and changes due to operating or design conditions, which are unique to PRT's light rail system. PRT Track Standards Committee has completed revisions of PRT's Track Standards dated January 2022.

Table 9 - Periodic Facility/Equipment Inspection

Facility/Equipment	Cycles
Rail Vehicles	Daily Inspections Bi-Weekly Inspections 5,000-Mile Inspection 10, 000-Mile Inspection 30,000-Mile Inspection 60,000-Mile Inspection 120,000-Mile Inspection State Inspections (Semi-annually) Annual Certification and Preventive Maintenance Campaigns Wheel Truing as needed based on inspections.
Wayside Signals	Grade crossings (Bi-weekly) Rail switches (Monthly) Automatic trip switches (Quarterly) Snow melters (Annually) Vital relays (Currently revamping the 2- and 4-year testing procedures for AC and DC relays.)
Traction Power Substations	Vital relays are on a two-inspection cycle depending upon the relay as outlined by Union Switch and Signal Company recommendations. Annual Testing/Inspection <ul style="list-style-type: none"> • Batteries and DC feeder breakers • Ventilation system • AC breakers and AC switchgear • Traction power rectifiers, and traction power breakers All Auxiliary Equipment heating, lighting, ventilation, inverters, manual roll-up doors are either covered under Substation Good Housekeeping and Inspection PM or as corrective maintenance only

Facility/Equipment	Cycles
Track	Track inspectors inspect the system on a weekly basis. Track geometry is measured annually with a tamping machine equipped with a computer-generated track measuring system or similar equipment attached to an LRV. The track measuring system has preset track parameters. Parameters for measuring track are set by PRT and APTA track standards.
Buses	Fluids, including, but not limited to, oil and antifreeze are tested regularly as part of the general maintenance warranty, and contract compliance procedures. A preventive maintenance plan is in place for all ADA-mandated accessibility features. Maintenance checks for wheelchair lifts on bus fleet are performed nightly. Lifts are routinely scheduled for maintenance at each bus location on the manufacturer's recommended intervals

2.16.2 Program Documentation

Railcar maintenance personnel maintain accurate mileage records on each vehicle, dates and work orders (inspections, repairs, and overhauls). The database is used to perform failure analyses and determine remedial actions. Records of each rail vehicle are sufficiently detailed to determine quickly the life of sub-assemblies, and to enable trend analysis. PRT management also reviews equipment trends for planning purposes.

Wayside signal equipment, track, and substation inspections are documented on Visual/Functional Checklists. Critical items/conditions are cycled through work order procedure. Inspection notes recorded on Visual/Functional Checklists are reviewed and filed.

When preset parameters are violated during track measuring system process, a defect is recorded, and its location and type of defect is printed out for repair.

The scope of the bus maintenance plan is to provide safe, clean, reliable transit service to PRT's customers through the adoption and implementation of sound maintenance practices as prescribed by law and based on PRT's experience and expertise. The bus maintenance plan is implemented daily through the conduct of normal business operations. All bus maintenance checklists include recommended manufacture, supplier, or builder procedures, programs, and guidelines. The current systems provide notification to management if scheduled intervals are missed, and corrective action is taken.

2.16.3 Coordination with Hazard Management Process

Safety critical equipment that does not meet established requirements is removed from service and/or tagged or locked-out. Vehicles or equipment that is involved in an accident are inspected by qualified personnel prior to being placed back into service.

Identified hazardous conditions disclosed in the inspection of facilities and equipment is formally submitted to the Division Director for review and corrective action. Unresolved unacceptable hazardous conditions will be submitted to the OSSRC for review, analysis, and resolution or forwarding to the CEO for review and resolution.

It is the responsibility of the Railcar Maintenance and System Safety Departments to audit vehicle inspection practices, procedures and documentation to verify whether rail vehicle maintenance department is in compliance with the PTASP. This activity is also supported by the PRTSRP. Deficiencies found as a result of system safety audits are integrated into appropriate database to track to resolution.

It is the responsibility of the Facilities and Rail Maintenance and System Safety Departments to audit facilities and rail maintenance inspection practices, procedures and documentation to verify whether rail maintenance department is in compliance with the PTASP. Deficiencies found as a result of system safety audits are integrated into appropriate database to track to resolution.

2.17 Integration with Public Safety and Emergency Management

PRT has developed an approved, coordinated schedule for all emergency management program activities which include meetings with external agencies; emergency planning responsibilities and requirements; processes used to evaluate emergency preparedness, such as annual emergency field exercises; after action reports and implementation of findings; revision and distribution of emergency response procedures; familiarization training for public safety organizations; and employee training. This section describes which PRT department is responsible for each of the emergency management elements. The PRT Emergency Management Plan (EMP), an SSI controlled document, incorporated by reference, discusses employee responsibilities during an emergency. The EMP also provides information as to PRT's coordination efforts with respective Federal and State officials and agencies.

The Pittsburgh Regional Transit's Security and Emergency Preparedness Plan (SEPP) is incorporated into this PTASP by reference. The SEPP is overseen, updated, and managed by the Chief of Police. The SEPP contains Security Sensitive Information (SSI) and available for review by authorized individuals at the Transit Police Department. Other personnel approved by the Chief of Police may view the document on Crossroads.

2.17.1 Allegheny County Emergency Management Plan

As a key participant in the Allegheny County Emergency Management Plan, the PRT is responsible for coordination and provision of transportation resources to federal, state, and local governments, volunteer organizations, and the general public response to a natural disaster or other event which necessitates immediate evacuation including terrorist acts. In such circumstances, the PRT is designated by Allegheny County's emergency operations center as an emergency support function for transportation. Emergency response planning, coordination, and training procedures are also contained in the Rail Standard Operating Procedures for Rail Operations, Bus Standard Operating Procedures, Emergency Management Plan and PRT's Security and Emergency Preparedness Plan.

2.17.2 Meetings with External Agencies

Staff members of PRT's System Safety and Police and Security Services are members of the Allegheny County Emergency Management, Pennsylvania Region Thirteen Task Force, Joint Terrorism Task Force (JTTF), National Safety Council, American Society of Safety Professionals and American Industrial Hygiene Association.

PRT staff attends scheduled meetings of the Allegheny County Emergency Management and Region Thirteen Task Force (Thirteen County Task Force) to coordinate and plan emergency response and proactive processes. All aspects of emergency response are represented at these meetings including local police, state police, FBI, postal inspectors, Attorney General's office, fire departments, emergency medical service, county emergency management and public utilities.

2.17.3 Pittsburgh Regional Transit Emergency Management Plan

The Emergency Management Plan is a living document that serves as the basis for PRT responses to the most difficult situations. The PRT Emergency Management Plan (EMP) has been developed to protect PRT employees, patrons, assets and our service area in the event of fire, explosion or other incidents of catastrophic proportions including industrial accidents, natural disasters or terrorist attacks. The EMP identifies the PRT's internal emergency response and ensures a direct link with local, state and federal emergency management groups. The EMP also defines for PRT's specific actions for command, control and communications for dealing with internal or community disasters.

The primary goal of the EMP is to provide a comprehensive all hazards approach for managing emergencies and events, including prevention/mitigation preparedness, response and recovery. The EMP covers emergencies due to criminal activity, terrorism, fire, natural disasters, hazardous materials spill, medical emergency, severe

weather, utility outage or other emergency situations occurring on or near any PRT facility or right-of-way. The EMP is applicable to all PRT personnel. It also may be utilized by outside agencies whose duties include the preservation or protection of life and property during a local or regional emergency.

The appropriate emergency plan is implemented immediately by Transit Police, Bus Traffic Operations (BTO) and/or Rail Traffic Operations (RTO) upon confirmation that an emergency, as defined within Plan exists. The Emergency Management Plan supersedes all other plans, rules and procedures which would be in effect during normal operations.

If an emergency condition exists which could affect any portion of PRT or its service area, the activities as outlined in the Emergency Management Plan are initiated. At such time, all activities and responsibilities for PRT operations will be under the direct control of the Chief Executive Officer or his/her designee, through the Emergency Operations Center. The PRT follows National Incident Management System (NIMS) / Incident Command System (ICS) guidelines for emergency response.

Exercises and drills are conducted following Homeland Security Exercise and Evaluation Program (HSEEP) guiding principles.

2.17.4 Emergency Management Evaluation

The Transit Police and Security Services Department personnel participate in annual drills and fire/life safety training with various emergency responders and PRT Departments including System Safety. Past drills have included:

- Familiarization Training – CBD/NSC Life Safety; September 2021; All PBF platoons.
- Tabletop Exercise, May 2021, NSC Tunnel Flooding Event
- Tabletop Exercise, September 2020, Pittsburgh Zoo & Aquarium, Active Shooter & Animal Escape
- Johnstown Incline rescue drill, October 2019
- Monongahela Incline Tabletop/Functional exercise, May 2019
- Major League Baseball, April 2019, Active Shooter scenarios
- Major League Baseball, June 2019, Mailroom Threat and Bomb Scenario
- Full Scale Tunnel Rescue/Mass casualty, June 2018, PBF, EMS, PRT
- Emergency Cart Familiarization, April 2018, Pittsburgh Bureau of Fire & Transit Police
- Major League Baseball, February 2018, Virtual Tabletop Exercise, MLB Drone
- CBD/NSC Safety, October 2017, Pittsburgh Bureau of Fire Subway Familiarization (Classroom and Field Training).
- Tabletop Exercise, Full Scale Active Shooter, 2nd Qtr. 2017.
- Mini Drills, SWAT Hostage Rescue with Tactical Team at SHV, Aug/Sept. 2016.
- Tabletop, Intelligence Sharing (Internal & External Agencies), 4th Qtr. 2016.

- Tabletop Exercise, “Any Given Sunday” NFL – LEA/Private Sector Tabletop Exercise, April 2015.
- Track/LRV Safety, Fall 2015, Pittsburgh Bureau of Fire Subway Ventilation Fan Simulation Training
- Tabletop Exercise, Cam Tran Tabletop Exercise, April 2015.
- Full/scale exercise, TSA I-STEP Program Operational Exercise, March 2014.
- Tabletop Exercise, PA Homeland Security, Pittsburgh Marathon, Prevention and Detection, March 2014.
- Mini Drills, Transit Police Active Shooter Training/Drills, May/July 2014.
- Blast Analysis Exercise, FBI, County, & Transit Police, Post Blast Analysis Training/Exercise, August 2014.
- Advanced SWAT, ESU Training/Drills, October 2014.
- Track/LRV Safety, Emergency Responder Training/Pittsburgh Bureau of Fire Transit Emergency Plan Review, PBF, Transit Police, Road Operations, EMS (500 + attended), January/February 2014.
- Training/Drills – Tubular Bus Assaults Which Entailed Hostage Rescue and Site Security of a Hijacked Bus with Hostages. (ESU-2013)
- Training/Drills – Tubular Light Rail Vehicle Assaults. Operation took place at the North Shore Subway Station and entailed an ACTIVE SHOOTER who rushed a rail vehicle and held hostage the occupants during a rush hour. (ESU-2013)
- Training/Drills – Active Shooter Training for Transit Police. This entailed training the entire department on the theory/movements of neutralizing the threat of an active shooter. (Transit Police–2013)
- Training/Drills – Basic Room Entry and Movements Associated with Basic and Advanced SWAT. Four officers also attended the Advanced Hostage Rescue Class taught by ex-Special Operations Personnel at FBI Academy, VA. (Select ESU Team-2013)
- North Shore Rail Extension, Emergency Responder Familiarization and Fire/Life Safety. All agencies including (Pittsburgh Fire, EMS and Police, EOD, Swat, PRT ESU, TSA, County and Regional Emergency Management. January through March 2012.
- North Shore, Fire Department mini drills that included; ventilation/smoke simulations with command control of emergency fan systems in tunnels and stations; water flow/fire simulations in tunnels and stations; and simulated LRV fires in tunnels. January through March 2012.
- North Shore Pittsburgh EOD/PRT ESU explosive training/drill simulations in stations. February 2012.
- Harmar Garage site, Active Shooter Training and Drills for all Transit Police and other outside departments. October through December 2012.
- Bus Breaching/Assault Training/Drills at Harmar Garage. PRT ESU and FBI Swat. April 2012.
- Co-hosted with FBI – Bus assault tactics at local gun club. Open to all regional Swat Teams. May 2012.

- North Shore Rail Extension, Emergency Responder Fire/Life Safety and Familiarization Training in preparation of pre-revenue drills and full revenue service. Training attendees; (Pittsburgh Fire, EMS and Police, Special units of Police, EOD, SWAT, PRT ESU, TSA, County and Region Emergency Management, Safety and Road Supervision) July through December 2011
- Mini-drills, Pittsburgh EOD and PRT ESU, Response to IED's North Shore Connector Stations, July through December 2011
- Tabletop, Hazmat incident in the CBD Steel Plaza testing Safe Site and internal SOP's, Transit Police & Dispatch, Safety, Operations, Environmental Officer, and OCC. September 2011
- Full-Scale/April 2010/NETL (national Energy Technology LAG) Active Shooter Multi-Agency
- Full-Scale/August 2010/ESU/SWAT CBD Response Multi-Agency
- Tabletop-Mini Drills/September 2010/Tactical Operation on Rail Transport, Pittsburgh, Multi-Agency
- Full-Scale/G-20/Multi-Agency Event/September 2009
- Tabletop/G-20 Preparedness/Multi-Agency/September 2009
- Tabletop/Underwater Terrorism/Multi-Agency/August 2009
- Multi-Agency, Federal, State, Local Emergency Management (IED on Bus) - 2008
- Steel Shield/Port of Pittsburgh – 2007
- Tabletop/Chemical Release Subway – 2007
- Functional Exercise/Chemical Release in Subway – 2007
- PNC Park All Star Game Drills - 2006
- PennDOT Fort Pitt Tunnel Rescue
- PNC Park, Multi-agency Response Drill, WMD, May 2005
- Federal, State and Local, Multi-agency Response to Berry Street Tunnel, West Busway, WMD Drill, October 2003
- Federal, State and Local, Multi-agency Response to CBD, Steel Plaza, WMD Drill, September 2000
- Annual mini drills with PRT, fire and EMS personnel, on-going

2.17.5 Implementation of Findings

The OSSRC meets monthly and supports both System Safety and the Transit Police and Security Services Department in reviewing drill and exercise scenarios and after-action reports. Following review, the OSSRC assists with appropriate corrective actions as necessary. Deficiencies requiring corrective action plans found as a result of training or drills are addressed by the responsible department with assistance from the System Safety or Police and Security Services Departments.

2.17.6 Revisions to Emergency Management Plan

The Emergency Management Plan will be reviewed and updated, as needed, or on an annual basis. Users of the Plan are encouraged to submit recommendations for its improvement. Comments are required to be specific and accompanied by the reasons for the recommendations. Revision proposals are directed to the Chief Safety Officer, who then reviews with the Chief of Police for concurrence. Distribution of the PRT Emergency Management Plan is controlled by the PRT Chief Safety Officer.

2.17.7 Familiarization Training

PRT's System Safety Department assisted the City of Pittsburgh Fire Department in developing a Standard Operating Procedure for the central business district, Panhandle Bridge, and Mt. Washington Tunnel. The Pittsburgh Bureau of Fire Emergency Operations Plan for the Light Rail Transit System was revised in 2011 and final document was published in 2012, to include the North Shore Connector. These emergency standard operating procedures have been distributed to the appropriate management personnel by the Chief Safety Officer.

Periodic familiarization and refresher training have been planned and coordinated between PRT's Safety Officers and the local fire and police departments. This training included disaster activities, inspections of tunnels, LRT emergency equipment, hot sticks, radios and emergency carts. Training sessions in emergency response to LRVs and motor coaches are conducted throughout the year.

The PRT's "Mass Transit Emergency Response Guide" was implemented in 2001 and is periodically revised to reflect changes in the fleet. All City of Pittsburgh Fire Fighters and an ongoing list of municipal departments are attending this training. Meetings/drills have been coordinated and implemented with the following agencies on various fire/life issues:

- AC Silver Team #430
- Allegheny County Fire Marshall's Office
- Allegheny County Fire Bureau
- Aleppo Township Volunteer Fire Company
- Broughton Volunteer Fire Department
- Baldwin #1 Volunteer Fire Department
- Baldwin EMS
- Becks Run Volunteer Fire Department
- Bellevue Fire Company
- Ben Avon Volunteer Fire Company
- Berkeley Hills Fire Company
- Blaine Hill Volunteer Fire Department
- Bower Hill Volunteer Fire Department
- Bradford Woods Volunteer Fire Company
- Brentwood Volunteer Fire Department
- Bridgeville Volunteer Fire Department

- Cecil #3 Volunteer Fire Department
- Central #140-7
- Cecil Township Volunteer Fire Department
- Cherry City Volunteer Fire Department
- Citizens Hose Fire/EMS
- City of Pittsburgh EMS
- City of Pittsburgh Fire Department
- Clairton Volunteer Fire Department
- Clairton Volunteer Fire Department and EMS
- Cochran Hose Company
- Crafton Volunteer Fire Department
- Crestas Volunteer Fire Company
- Dormont Fire and Police Departments
- Dravosburg #1 Volunteer Fire Company
- Duquesne Volunteer Fire Department
- East Carnegie Volunteer Fire Department
- East Pittsburgh Fire Department
- Elizabeth Volunteer Fire Department
- Elrama Volunteer Fire Department
- Etna Volunteer Fire Department
- Eureka Fire-Rescue
- Evergreen Fire Company
- Fairview Volunteer Fire Department
- Fawn Township Volunteer Fire Department #2
- Federal, State and Local, Multi Agency Response to Berry Street Tunnel, West Busway, Weapons of Mass Destruction Drill (October 2003).
- Federal, State and Local, multi-agency response to CBD, Steel Plaza Weapons of Mass Destruction Drill. (Sept-2000)
- Forest Hills Volunteer Fire Department
- Franklin Park Volunteer Fire Company
- Frazer Township #1
- Gallatin Sunnyside Volunteer Fire Company
- Gill Hall Volunteer Fire Company
- Glassport #1
- Glassport #2
- Greentree Volunteer Fire Department
- Hampton Volunteer Fire Department
- Harmar Township Volunteer Fire Department
- Harrison Hills Volunteer Fire Company
- Highland Volunteer Fire Department
- Hilltop Hose Company #3
- Homestead Volunteer Fire Department
- Homeville #1
- Imperial Volunteer Fire Department

- Igomar Volunteer Fire Department
- Ingram Volunteer Fire Department
- Jefferson Hills – 885 Volunteer Fire Department
- Jefferson Hills – Floreffe Volunteer Fire Department
- Jefferson Hills – Gill Hall Volunteer Fire Department
- Jefferson Hills – Large Volunteer Fire Department
- Jefferson Hills EMS
- Keating Volunteer Fire Department
- Laurel Gardens Volunteer Fire Department
- Leetsdale Volunteer Fire Department
- Liberty Boro #183
- Library Volunteer Fire Department
- Lincoln Boro #184
- Logan Ferry Heights Volunteer Fire Department
- Lower Burrell Volunteer Fire Department
- Marshall Township Volunteer Fire Department
- McKees Rocks Volunteer Fire Department
- Moon Run Volunteer Fire Department
- Moon Township Fire Department
- Mount Lebanon Fire Department
- Mt. Lebanon Fire and Police Departments
- Mt. Troy Volunteer Fire Company
- Munhall Area Pre-Hospital Services
- Munhall Station 200
- Munhall Station 201
- Munhall Station 202
- Munhall Station 203
- Munhall Station 204
- Neville Island Volunteer Fire Department
- New Kensington Engine Company #5
- North Versailles Volunteer Fire Department
- Option Independent Fire Company (Baldwin)
- Peebles Volunteer Fire Department
- Penn Hills #5 Fire Department
- PennDOT Fort Pitt Tunnel Rescue
- Pennsylvania State Fire/Rescue Instructors
- Perrysville Volunteer Fire Company
- Pioneer Hose Company
- Pitcairn Volunteer Fire Department
- Pleasant Hills Volunteer Fire Department
- PNC Park, Multi-agency Response Drill, WMD, May 7, 2005
- Prism EMS
- Quail Volunteer Fire Department
- Rosedale Volunteer Fire Department

- Ross/West View EMSA
- South Baldwin Volunteer Fire Company
- South Fayette Volunteer Fire Department
- Spring Garden Volunteer Fire Company
- Sturgeon Volunteer Fire Department
- Summit Hose Company
- Versailles Volunteer Fire Company
- West Elizabeth Volunteer Fire Department
- West Homestead Volunteer Fire Department
- West Mifflin – Duquesne Annex Volunteer Fire Department
- West Mifflin #3
- West Mifflin #4– Skyview Volunteer Fire Department
- Wexford Volunteer Fire Company
- Whitaker Volunteer Fire Company
- White Oak #1
- Whitehall Fire Company
- Wilkins Township Volunteer Fire Company

2.17.8 Employee Training

All PRT operations and maintenance personnel undergo emergency response training to ensure they have a thorough understanding of their role and responsibility during an emergency. At a minimum, training is provided on PRT SOP's and emergency plans that the employee may be required to implement, and on any specialized equipment by the Instruction Department. This training occurs as part of the new hire training program for both operators and maintenance. Training records for each employee are kept in PeopleSoft.

2.18 Responsibility for Emergency Management

2.18.1 Emergency Operations Center (EOC)

The PRT's Emergency Operations Center (EOC) is utilized to coordinate, manage and provide mitigation planning for emergencies. The PRT's Emergency Operations Center (EOC) is located on the second floor of Pitt Tower, along the Martin Luther King, Jr. East Busway. If needed, alternate EOCs are established. Potential sites include South Hills Junction, Manchester Road Operation Center, the Rail Center and the Allegheny County Emergency Center (already fully functional). The EOC will be equipped with display boards, computers and/or laptops (with internet connection), television with satellite dish, telephone lines, portable radios and other equipment as directed by the Emergency Operations Center Director.

2.18.1.1 Activation Criteria

The EOC may be activated for any of the following reasons:

- Resources beyond PRT's capability are required to respond to an emergency.
- An emergency of long duration.
- Major policy decisions will be needed.
- Local or state emergency is declared.
- Activation of the EOC will be advantageous to the management of the emergency.

2.18.1.2 Activation of the EOC

The EOC may be activated by the Chief Executive Officer, Chief Legal Officer, Chief Safety Officer, Chief of Police and Security or Chief Operating Officer(s).

Immediately following the activation of the EOC, the following people are to be notified of the activation and asked to report, or send a representative, to the EOC:

- Chief Executive Officer
- Chief Legal Officer
- Chief Operating Officer
- Chief Development Officer
- Chief Information Officer
- Chief of Police and Security Services
- Chief Safety Officer
- Chief Communications Officer
- Chief Human Resources Officer
- Chief Strategy Officer

After activation of the EOC, the EOC staff notifies and coordinates with the following agencies, as applicable:

- Allegheny County Division of Emergency Services (Region 13)
- Federal Agencies as required

2.18.1.3 Functions of the Emergency Operations Center

- Implement incident plans and document all Emergency Operations Center actions.
- Request assistance from outside emergency response agencies for fire, medical, police and evacuation emergencies.
- Dispatch supervisors to the scene or other designated locations.

- Dispatch Transit Police to assist at the incident scene.
- Communicate with BTO and RTO and control all bus and LRV movements, as required; as appropriate, establish correct ventilation, activate/deactivate overhead power (rail).
- Contact maintenance supervisors for assistance, as required.
- Coordinate requirements for supplemental service, both bus and rail.
- Perform management notifications, respond to incoming telephone calls and perform other duties as assigned.
- Provide timely media and patron information.

2.18.1.4 Levels of Emergency

The PRT recognizes three levels of emergency, which will be determined by the severity of the emergency. The purpose of this rating system is to provide a universal standard for determining the magnitude and scope of emergency response required by the event. It should be noted that the EOC only activates during Level III emergencies. Enhancements in communications systems (smart phones, radios etc.) as well as the addition of the Alert System have reduced the need for the EOC to activate for lesser emergencies.

Table 10 - Levels of Emergency

Levels of Emergency	
Level I – Minor Emergency	An incident where PRT property or equipment is damaged, employees or customers are injured and/or service is disrupted. Emergency services may be required, but in general, PRT operating department resources are adequate to conclude the incident.
Level II – Major Emergency	An emergency requiring the close coordination of several PRT departments (Operations, System Safety, Transit Police and Security Services, Communications and others) and mutual aid from community Police, Fire or Medical Services. Examples may include a large fire, severe injury accident, and significant criminal event, emergency in the rights-of-way (including tunnels), area-wide power outage, civil disturbance, major hazardous material spill or severe weather. This kind of event has a greater impact upon portions of PRT operations and may halt some of those operations temporarily. PRT operating department resources may be adequate to conclude the incident.

Levels of Emergency	
Level III – Catastrophic Emergency	A regional disaster or incident requiring a large number of outside resources to assist PRT or in which PRT is required to assist. Response to this type of emergency requires centralized emergency management of all PRT functions, as well as decentralized on-site management and response. When a Level III disaster is declared, the EOC will be established to direct PRT resources and to coordinate with emergency response agencies.

2.18.1.5 EOC Management

The EOC Management Section is responsible for overall management and administration of the emergency. The EOC staff also includes certain support staff functions required to support the EOC function.

EOC Director - The EOC Director is in charge of the overall management of the incident in the EOC by making executive and policy decisions based on the information received. The following officers will serve as the EOC Director based on their presence and availability:

1. Chief Executive Officer
2. Chief Operating Officer(s)
3. Chief Legal Officer
4. Chief Engineer
5. Chief of Police and Security Services
6. Chief Safety Officer

Operations - The Chief Operating Officer(s) are responsible for the operation, vehicle maintenance and coordination of transportation services (bus and rail). The following functional areas support this section:

- Road Operations and Rail Service Delivery – Supervisors responsible for coordinating the on-site response to incidents.
- Rail and Bus Operations – Provides the response for any vehicle needs, including two vehicles and provides the necessary vehicle mechanics at the scene.

Chief Legal Officer – Chief Legal Officer will act as an advisor to the Chief Executive Officer in areas of safety and legal issues.

Chief Engineer – The Chief Engineer will provide technical assistance with issues regarding any PRT facilities or rights-of-way and will coordinate any contractor assistance, as required. The following functional areas support this section:

- Facilities & Rail Maintenance – Repairs and restores track, signals and overhead and other rail related facilities; and provides heavy rescue equipment and re-railing equipment for rail related incidents.
- Technical Support/Capital Programs – Provide technical assistance with issues regarding any PRT Facilities or Rights-of-Way and will coordinate any contractor assistance, as required.

Transit Police - Transit Police will assume the role of Incident Commander when the incident is a potential or actual crime zone. Police will coordinate crowd control; assist with the evacuation of customers and/or employees, and coordinate traffic control and security within and around the incident site. Police will also coordinate with local, state and federal emergency operations agencies. A representative will be sent to the Allegheny County EOC.

System Safety - System Safety personnel will be responsible to ensure that all PRT operations are maintained with the highest degree of safety. System Safety will identify any special needs and provide strategies to safely mitigate the situation.

Communications - PRT Chief Communications Officer will act as the authoritative source of information to the public and news media. The Chief Communications Officer will also coordinate the dissemination of information to PRT employees and documenting all functions and activities of the EOC. At the conclusion of the incident, the Chief Communications Officer will issue a report outlining all activities and policy decisions.

The social media & Communications Representative will assist the Chief Communications Officer in disseminating customer information via customer service clerks and PRT's web page.

Information Technology – Information Technology staff will be available to coordinate troubleshooting and repair of any communication-related problem (CCTV Surveillance Systems, telephone, computer etc.).

Technical Specialist -Technical Specialists will act as advisor resource persons to the EOC Director. They will provide expert information in the development of an Action Plan. Technical Specialists will be summoned on an as needed basis.

2.19 Threat and Vulnerability Management Process

PRT identifies, assesses, and manages threats and vulnerabilities during ongoing operations, and for major projects, infrastructure extensions, new vehicle, and equipment purchases, including integration within the safety certification process. The threat and vulnerability process follows the FEMA Public Transportation – Risk Assessment Methodology (PT-RAM) also and best practices within the transit industry. PRT has recently adopted the FBI based threat and vulnerability assessment process as an additional tool. Either method will be acceptable for system threat & risk assessment upon approval of the Transit Chief of Police. Additional information can be found within the most recent SEPP.

2.20 SMS Documentation and Records

PRT's PTASP will be updated as relevant organizational, or process changes occur and at a minimum annually as required by 673.11(a)(5). In addition, PRT will maintain its PTASP in accordance with the recordkeeping requirements of 673.11(c). PRT will also maintain its relevant Safety Management System (SMS) documents and those referenced herein for a minimum of three (3) years after they are created in accordance with 673.31. Key processes and procedures required to carry out the SMS that are not included or referenced elsewhere in the PTASP will be recorded by the respective department and added to the PTASP when revised as appropriate.

The System Safety Department will serve as the official office of record for the PTASP and relevant SMS documentation. This documentation will typically include a back-up electronic copy of the various documents.

SMS documentation will be available for review at the PRT System Safety Department, Heinz 57 Center, 345 Sixth Avenue, Pittsburgh, Pennsylvania.

3.0 SAFETY RISK MANAGEMENT

3.1 Safety Risk Identification, Assessment, Mitigation, Monitoring

Section 3 describes PRT's Safety Risk Management program. PRT's Safety Risk Management program is developed to reduce its risk to the lowest acceptable practical level. The Safety Risk Management program elements include: safety hazard identification, safety risk assessment, and safety risk mitigation. PRT understands the role of the RTSRP, the state safety oversight agency, in providing continuous monitoring of the safety risk management process.

3.2 Regulatory Requirements

The State Oversight Rule in 49 CFR §674.29 provides RTSRP with the authority to require the PRT to document, in its PTASP or supporting procedures, the following:

- The PRT's overall approach to implementing an integrated, system-wide safety risk management mitigation process (i.e., not only to address safety risks of operational hazards, but also safety risks and hazards from extensions/modifications, operational changes, or other changes within the rail transit environment);
- Sources and mechanisms used by the PRT to address safety risks include identifying hazards (i.e., customer complaints, employee reports, review of near-miss incidents and control center logs, analysis of maintenance records, accident investigations, audits, inspections, Division Safety Committees, formal hazard analysis, etc.);
- Processes used by the PRT to evaluate and prioritize risks/hazards (i.e., formal safety risk hazard evaluation and analysis, informal assessment based on experience and technical recommendations, testing analysis, consultant reviews, manufacturer's recommendations, etc.);
- Identify mechanism used to track mitigations, through resolution, the identified safety risks, including reported hazards.
- Any required event investigation reports or other documents to be provided by the PRT to RTSRP, as specified in the RTSRP Program Standard, regarding any events or hazard that triggers the hazard identification/notification threshold; and
- The process used by the PRT for reporting ongoing safety risk management program activities to RTSRP (i.e., monthly or quarterly logs, monthly or quarterly meetings.)

3.3 RTSRP Requirements

The RTSRP requires that the PRT document its safety risk management process. The

RTSRP recognizes that safety risks/hazards vary in severity and frequency, and that many will be mitigated at the operating, maintenance, or other front-line department level. As such, the transit agency must document at least those risks/hazards which rise beyond the front-line department level and must describe its review and analysis of those below this threshold.

Tracking systems used by the PRT to record the safety risk management process, including results of these analyses and the status of identified mitigation activities (i.e., information management systems, databases, paper records, committee meeting minutes, etc.) should include steps such as:

- A specific Safety Risk/Hazard Management Log which documents ongoing safety risks/hazards. A suggested format includes, at minimum, such headings as identification number, description, date identified, source, transit mode, location, assessment results, recommendations (mitigations / corrective actions), and status, or combination thereof; and/or
- A committee or group that reviews and addresses hazards when necessary and when safety risks/hazards are elevated beyond established thresholds.

In the case of safety risk/hazard investigations, the RTSRP may request that the PRT Safety Department conduct an investigation on the RTSRP's behalf, independent of investigatory activities conducted by other RTA departments. The RTSRP will typically request that PRT Safety Department perform a safety risk/hazard investigation and analysis using its safety risk management process.

3.4 Pittsburgh Regional Transit Safety Risk Management Process

3.4.1 Overview

Safety Risk Management including safety risk/ hazard identification, assessment, mitigation, resolution, and monitoring is a core element of this PTASP emphasizing timely correction of unsafe conditions -- ideally, anticipated and reconciled before a serious accident, injury, or damage occurs. The methodology outlined for the formal process of safety risk management and hazard identification, mitigation, and resolution is based on the U.S. Military Standard 882E and has been modified to better fit PRT's transit system safety risk/hazard management.

To ensure that the PRT provides safe and reliable transportation services, PRT has established a process by which safety risks and hazards are identified, assessed for potential impact and consequences on the operating system and mitigated/resolved to the lowest acceptable practical level to PRT management and applicable regulatory agencies. It is the CSO's responsibility to develop and implement this risk management process.

All PRT management, staff, contractors, and suppliers are required to implement high standards of safety and system assurance throughout the design, construction, testing, and operational phases of PRT's projects. Safety risks and hazards which cannot be eliminated in the design are to be controlled by acceptable mitigations that may include safety devices, warning devices, training, and/or written procedures to prevent events and mishaps.

Every PRT employee and contractor is required to report any safety risk / hazard / unsafe condition to his or her Supervisor or Department Manager. The safety risk / hazard / unsafe condition should be addressed or mitigated, if within the individual's ability and scope. Prior to a mitigation being put in place, PRT will conduct a routine safety risk management process whereas the identified hazards or unsafe conditions will identify potential consequences and then evaluated by the appropriate PRT personnel with field knowledge, training, and experience to determine the severity and probability or risk rating for the consequences. Discussions include the evaluation of existing mitigations that are already in place and the determination of the mitigation assessment plan that will be conducted to monitor their effectiveness. This routine process is used by Safety Officers, Management, Safety Committees and even Safety Committee members and may occur at various times throughout PRT departments and the agency.

Most safety risks and hazards in the system are identified in the field and reported to the RTO/BTO control centers and entered on daily operations reports bus & rail and operation occurrence reports. These safety risks / hazards are addressed by the responsible departments or units through evaluation, mitigation/corrective action measures and reporting. Other reporting methods are available to all employees that discover a safety risk or hazardous condition. Those methods can be found in section 5.3.3 (Employee Safety Reporting). Contractors should notify their respective PRT project manager as well as their own Management staff and maybe also report issues directly to System Safety. If a resolution is not achieved at the department level, the issue is brought to the division level and the OSSRC.

Accidents and changes to operating procedures, maintenance procedures, and training programs are reviewed and discussed relative to their impact on safety in the OSSRC and other staff meetings. When safety risks / hazards are identified during the review of plans and specifications for equipment or facility modifications, the Chief Safety Officer and the Project Manager in charge of the project are to be notified immediately and the identified safety risk / hazard and options for mitigation and resolution are discussed and implemented. Unresolved safety risks / hazards may be presented to the OSSRC.

3.4.2 Safety Risk Management Methodology

Safety risk identification and resolution is a safety risk management process managed by PRT's Chief Safety Officer with the assistance of the OSSRC, management, DSCs, and stakeholders. PRT determines the consequences of hazards through management and safety committee informal discussions, using regular and routine data along with any available information and feedback gained from field personnel and local or department management. The safety risks of these consequences will then be rated utilizing the Safety Risk/Hazard Rating Tables discussed later in this section. Safety Risks/Hazard analyses and ratings will be overseen by the System Safety Department with input from stakeholders and subject matter experts (SME). If needed, PRT will engage an SME contractor for assistance and guidance. At a minimum a safety risk/hazard analysis will be completed for unacceptable hazardous conditions. For other than unacceptable hazardous conditions, the Chief Safety Officer with the OSSRC will determine, on a case-by-case basis, those safety risks/hazards for which formal analyses will be conducted using the hazard reporting table in this section. Division Safety Committees are also responsible to identify and track to resolution hazards identified. In addition, issues identified in the Safety Committee meeting log with an unacceptable rating will be immediately forwarded to the OSSRC and logged in PRT's CAP log. Items will be tracked through the OSSRC Committee log and the CAP log until resolved. System Safety's Safety Officers are responsible for their respective divisions/locations safety risk ratings. This includes the Safety Committees, Internal Audits and/or Safety Inspections, as necessary. All PRT staff, and committee meetings are forums for identifying real and potential hazards. Committee members bring those safety risks and hazards identified by fellow employees to the meetings and are discussed, rated and tracked on the monthly committee log. Those logs are distributed to each committee member monthly.

To address safety risks/hazards resulting from system extensions or modifications, operational and other changes, safety analysis included in design and procurement contracts will provide for:

- Identification of safety concerns and hazards
 - Reviewing PRT's safety data for safety concerns to elevate
 - Identify any existing mitigation measures currently in place
- Assess safety risks
 - Conducting risk assessments to evaluate severity and likelihood of potential consequences associated with the safety concern
- Develop mitigations (Also refer to Section 2.10 and 3.4.1)
 - Develop a mitigation plan that identifies recommended measures to reduce risk, establish a timeline, costs, and performance indicators
- Implementation of mitigations (Also refer to Section 2.10 and 3.4.1)
 - Implement the mitigation measures in accordance with the approved plan
- Timely awareness of hazards for those who must resolve them

- Trackability and control of hazards through all phases of a project's life cycle
- Monitor safety performance
- Monitor the safety concern and performance indicators in accordance with the mitigation plan
- Communicate the results, as appropriate, to stakeholders

Safety Risks / Hazards at the PRT may be identified by any or all of the following methods:

- Formal analyses prepared and submitted by contractors
- Design reviews conducted as part of the design process
- Preliminary field observations during project construction and testing
- Hazard analysis
- Threat & risk assessments
- Safety Committees
- Operating experience
- Review of control center logs, and maintenance records
- Rule compliance observations
- Employee/passenger/public observations/safety concerns
- Employee and contractor safety and hazard reports
- Accident investigation findings
- Inspections and audits
- Information provided by an oversight authority and the FTA
- Outside agencies safety concerns/recommendations
- Recommendations of other transit properties

PRT's Safety Risk Management Program includes specific thresholds at which further analysis, investigation and reporting will occur. The following table identifies issues that must be reported to the RTSRP and the department with primary report writing responsibility. Reportable "unacceptable" hazards will be in compliance with Table 15 "Acceptable Criteria Table" of this document.

Hazards requiring a written hazard investigation, as defined in the table, will be completed by the responsible department, forwarded to Deputy Chief Safety Officer and entering into the Hazard and/or CAP log for tracking and resolution.

Hazards requiring a formal analysis of trends, as defined in this table, will be tracked in the monthly OSSRC Committee log. Departments with primary report writing responsibilities will submit reports to the Deputy Chief Safety Officer for processing.

In either case, all unacceptable hazards identified in the Hazard table will be reported to the RTSRP within 24 hours and all others as specified in the chart below.

Table 11 - Required Safety Risk/Hazard Reporting Thresholds and Reporting Requirements

Safety Risk/Hazard	Applicable to	Reports Required Primary / Support
Any safety risk/hazard deemed “unacceptable” or equivalent, per the PRT safety risk management program	All rail transit modes	Notify (RTSRP) within twenty-four (24) hours of discovery, document in Hazard Log, Assemble written hazard investigation report specific to the particular hazard <u>Primary:</u> System Safety <u>Support:</u> As determined by safety risk/hazard
Red signal violation	All rail transit modes	Notify (RTSRP) within 24 hours. Assemble written hazard investigation report specific to the particular hazard <u>Primary:</u> Rail Service Delivery <u>Support:</u> Road Ops, System Safety, Rail Car Maintenance, Transit Police
Inclined plane cable or major component failure	Inclined planes	Notify (RTSRP) within 24 hours. Assemble written hazard investigation report specific to the particular hazard <u>Primary:</u> LRT Systems, Power, & Facilities <u>Support:</u> Tech Support
Fire event not otherwise reportable.	All rail transit modes	Notify (RTSRP) within 24 hours. <u>Primary:</u> As determined by event <u>Support:</u> Tech Support, System Safety
Near Miss event - to include Face-up and Work Zone incursion	All rail transit modes	Notify (RTSRP) within 24 hours <u>Primary:</u> As determined by event <u>Support:</u> System Safety
Service Disruption of Modification	All rail transit modes	Notify (RTSRP) within 24 hours <u>Primary:</u> As determined by event <u>Support:</u> System Safety

Safety Risk/Hazard	Applicable to	Reports Required Primary / Support
Assault – Any serious injury within 30 days to be the results of criminal actions not related to operations or maintenance.	All rail transit modes	Notify (RTSRP) within 24 hours <u>Primary:</u> Transit Police <u>Support:</u> System Safety
Homicide – Any death within 30 days as a result of criminal actions not related to operations or maintenance of the system	All rail transit modes	Notify (RTSRP) with 24 hours <u>Primary:</u> Transit Police <u>Support:</u> System Safety
Door event, including: (a) Doors open during train movement (b) Doors open on wrong side or off platform (c) Un-commanded door open	All rail transit modes including inclined planes	Notify (RTSRP) monthly (15 th day following the month of the occurrence) <u>Primary:</u> Road Ops, Rail Maintenance, Tech Support <u>Support:</u> System Safety
Trespassing - Unauthorized persons entering the track area – trespassing (known to the transit agency)	All rail transit modes, including inclined planes	Notify (RTSRP) monthly (15 th day following the month of the occurrence) <u>Primary:</u> Transit Police <u>Support:</u> Rail Operations, Road Operations
Falls to track area – Persons entering track area – accidental (known to RTA).	All rail transit modes, including inclined planes	Notify (RTSRP) monthly (15 th day following the month of the occurrence) <u>Primary:</u> Transit Police <u>Support:</u> Rail Service Delivery, Road Operations
Collision of any fixed guideway transit vehicle not meeting the requirement for reporting as an accident.	All rail transit modes, including inclined planes, and busway incidents only	Notify (RTSRP) monthly (15 th day following the month of the occurrence) <u>Primary:</u> Road Operations <u>Support:</u> Bus/Rail Operations, LRT Systems, Tech Support, System Safety, Transit Police

Safety Risk/Hazard	Applicable to	Reports Required Primary / Support
System Failure	All rail transit modes including inclined planes	Notify (RTSRP) monthly (15 th day following the month of the occurrence) Primary: Tech Support, Rail Service Delivery, LRT Systems Support: System Safety

3.4.3 Safety Risk Investigation, Assessment, Mitigation and Monitoring

3.4.3.1 Safety Risk Investigation

Safety risks and hazards which are not mitigated at the operating, maintenance, or other front-line department level are appropriately investigated by the System Safety Department, assisted by the responsible Operations Department. Investigation findings are documented and reported to the local Safety Committee. Those issues that the local Safety Committee is unable to resolve are escalated to the OSSRC through the Chief Safety Officer for resolution.

If PRT staff or a PRT contractor discovers the existence of an Unacceptable Hazardous Condition (UHC), and System Safety concludes by using the SRM process Resolution Matrix that the hazardous condition is categorized as unacceptable (could cause death or injury to passengers or employees if not immediately corrected), the Chief Safety Officer or his designee must be notified immediately. The Chief Safety Officer or his designee must then notify the RTSRP as defined in Section 3.4.2 (Reporting Thresholds).

In certain cases, the RTSRP has determined that a formal investigation is necessary for events occurring at the PRT. Required Safety Risk/Hazard reporting and written Safety Risk/Hazard investigations are defined in Section 3.4.2 of this document.

For investigation of safety risks/hazards, events, and incidents, the PRT will perform an investigation. Such investigations will be conducted in accordance with the processes outlined in Section 3 of this PTASP. To the maximum extent possible, the RTSRP will identify to the PRT whether it requires provisions of existing incident documentation or new and independent System Safety Department investigation. The RTSRP may modify deadlines as listed in the procedure due to the nature of a particular safety risk/hazard or incident.

In the case of safety risk investigations, the RTSRP will often request that the PRT's System Safety Department conduct an investigation on the RTSRP's behalf,

independent of investigatory activities conducted by other PRT departments, but the SSO can also perform its own investigation or participate in the RTA's investigation.

3.4.3.2 Safety Risk Assessment

Safety Risk/Hazard severity categories are defined to provide a qualitative measure of the worst credible mishap resulting from personnel error; environmental conditions; design inadequacies; and procedural deficiencies for a system, subsystem, or component failure or malfunction as indicated in the following table:

Table 12 - Risk Severity

Category	Description	Mishap Definition
1	Catastrophic	Could result in one or more of the following: death, permanent total disability, irreversible significant environmental impact, or monetary loss equal to or exceeding \$10M.
2	Critical	Could result in one or more of the following: permanent partial disability, injuries or occupational illness that may result in hospitalization of at least three personnel, reversible significant environmental impact, or monetary loss equal to or exceeding \$1M but less than \$10M.
3	Marginal	Could result in one or more of the following: injury or occupational illness resulting in one or more lost workday(s), reversible moderate environmental impact, or monetary loss equal to or exceeding \$100K but less than \$1M.
4	Negligible	Could result in one or more of the following: injury or occupational illness not resulting in a lost workday, minimal environmental impact, or monetary loss less than \$100K.

The probability or likelihood that a hazard will occur during the planned life expectancy of the system element, subsystem, or component can be described subjectively in potential occurrences per unit of time, event, population, items, or activity. A qualitative hazard probability or likelihood of occurrence may be derived from research, analysis, and evaluation of historical safety data from the same or similar systems. Supporting rationale for assigning a hazard probability will be

documented in hazard analysis reports. A qualitative hazard probability ranking is as follows:

Table 13 – Safety Risk/Hazard Probability (Likelihood)

Description	Level	Probability	Fleet or Inventory
Frequent	A	Likely to occur often in the life of an item.	Continuously experienced.
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 be expected to occur.
Extremely Improbable	E	So unlikely, it can be assumed occurrence will not be experienced to an individual item.	Extremely unlikely to occur but possible.
Eliminated	F	Incapable of occurrence. This level is used when potential hazards are identified and later eliminated.	Incapable of occurrence. This level is used when potential hazards are identified and later eliminated.

The objective of safety risk/hazard identification and assessment is to identify and define as many safety risks and hazardous conditions as possible and enter them into the Safety Risk Hazard Resolution process before those conditions or associated actions cause or contribute to an accident. Although it is virtually impossible to identify every safety risk/hazard, there are two basic time-tested methods for orderly identification of hazards: inductive and deductive.

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

- Preliminary Hazard Analysis (PHA)
- Sub-System Hazard Analysis (SHA)
- Operating Hazard Analysis (OHA)

The deductive hazard identification method involves defining an undesired effect or event (e.g., collision, derailment, or fire) and then deducing the possible conditions or system component faults (or combinations thereof) which are necessary to cause the undesired effect or event. The techniques most commonly used for deductive hazard identification are Fault Tree Analysis and Failure Modes and Effects analysis.

PRT's system accident experience over its years of operation has been a reliable source of input information to aid both the inductive and deductive processes.

3.4.4 Safety Risk / Hazard Control and Elimination

Before implementation of any corrective action, system safety analyses establish a hazard severity category (1 through 4) and a probability ranking (A through F) which are combined to form a Risk Index, reflecting both severity and probability of occurrence for each identified hazard. A Risk Index is assigned to a hazard before implementation of any corrective action. The range of possible Risk Indices is shown in the following matrix.

3.4.4.1 Hazard Risk Indices

Table 14 - Safety Risk Management Indices

Safety Risk Assessment Matrix				
<div>Severity</div> <div>Probability</div>	Catastrophic (1)	Critical (2)	Marginal (3)	Negligible (4)
Frequent (A)	High 1A	High 2A	Serious 3A	Medium 4A
Probable (B)	High 1B	High 2B	Serious 3B	Medium 4B
Occasional (C)	High 1C	Serious 2C	Medium 3C	Low 4C
Remote (D)	Serious 1D	Medium 2D	Medium 3D	Low 4D
Extremely Improbable (E)	Medium 1E	Low 2E	Low 3E	Low 4E
Eliminated (F)				

Risk Assessment Matrix (Based on MIL-STD-882E¹)

Risk assessment criteria will be applied by System Safety staff to the identified hazards based on their estimated severity and probability of occurrence to determine acceptance of the risk or the need for corrective action to further reduce the risk. The risk assessment and acceptance criteria will assist decision-makers in understanding the amount of risk involved by accepting the hazard relative to the costs (schedule, dollars, operations, etc.) to reduce the hazard to an acceptable level or in the case of an unacceptable level implementing reporting and investigation requirements. The following table identifies the acceptance criteria:

3.4.4.2 Acceptance Criteria

Table 15 - Acceptance Criteria

Risk Tolerability Matrix	
Risk Assessment Code (RAC)	Criteria by Risk Assessment Code
1A, 1B, 1C, 2A, 2B	Unacceptable. CEO and RTSRP Notification.
1D, 2C, 3A, 3B	Undesirable. Chief Operating Officer decision required.
1E, 2D, 3C, 3D, 4A, 4B	Acceptable with review by Local Safety Committee and approval of Department Chief or Deputy, subject to review by the OSSRC
2E, 3E, 4C, 4D, 4E	Acceptable with review by Safety Officer and approval by the Deputy Chief or Chief Safety Officer

Risk Tolerability Matrix (Based on MIL-STD 882E modified for PRT)

Action will be taken to eliminate identified hazards or reduce the associated risk. Catastrophic and critical hazards will be eliminated, or their associated risk reduced to an acceptable level. If this is impossible or impractical, alternatives will be recommended for the appropriate decision making.

¹ Modified for PRT application

3.4.4.3 Safety Risk/Hazard Resolution Precedence

The order of precedence for satisfying system safety requirements and resolving (eliminating or controlling) hazards will be as follows:

- **Design for Minimum Risk.** The primary safety effort during the design phase of a project will be an attempt to eliminate hazards through selection of design features (e.g., fail safe, redundancy).
- **Incorporate Safety Devices.** Hazards which cannot be eliminated through design will be reduced to an acceptable level through the incorporation of appropriate safety devices.
- **Provide Warning Devices.** Where it is not possible to preclude the existence or occurrence of a hazard, devices will be installed for the timely detection of the hazard condition and the generation of an adequate warning signal.
- **Develop Special Procedures and Training.** Where it is not possible to reduce the magnitude of an existing or potential hazard through design or the use of safety and warning devices, special procedures will be developed (by contractor or PRT, as required) to control the hazard.

All facility, system, and vehicle specification Requests for Proposal will require that responding contractors/suppliers solve hazards in accordance with this list in order of precedence. Specifications will include the requirement for all contractors/suppliers who provide systems, subsystems, or equipment that affect safe vehicle movement or passenger/employee safety to establish and maintain a Safety Plan. These program plans will, at a minimum, define objectives, tasks, procedures, schedules, and data submittal for the safety activities that will be performed by the contractor/supplier. The contractor/supplier Safety Plan and supporting documentation must be approved by the PRT department responsible for the contract in coordination with the OSSRC.

3.4.4.4 Safety Risk/Hazard Tracking

Hazards will be documented, tracked and monitored at the System Safety Division Committees, SERT, and the OSSRC levels in meeting minutes. Upon mitigation completion for a period of 60 days the hazard may be closed out, provided the mitigation is successful based upon observations, data, complaints, and/or inspections. The Committees Meeting Minutes which document ongoing hazards includes the following:

- Hazard identification number
- Responsible department
- Description of hazard
- Date identified

- Source of hazard
- Assessment results
- Hazard rating
- Corrective action
- Current status
- Targeted completion date

Unacceptable hazards are also tracked by number and fields noted in the Hazard Reporting and Correction Action Plan in VectorSolutions (formerly IndustrySafe). The RTSRP conducts formal status meetings with PRT System Safety Department representatives once each quarter (every three months). More frequent meetings may be conducted if needed, based on current events.

3.4.4.5 Hazard Resolution Schedule

Hazards identified within the system are to be evaluated by appropriate staff and mitigated by either eliminating or controlling to a level acceptable to PRT's management. The following schedule has been developed to ensure that the optimum level of safety is achieved through the expeditious resolution of hazards, once identified. All levels of hazards are reviewed by appropriate staff at least on a quarterly basis.

Table 16 - Hazard Resolution Schedule

Criterion	Resolution Timetable
Unacceptable - CEO and RTSRP Notification.	A hazard with a risk index of unacceptable must be reported to RTSRP within (24) hours of the determination and acted upon as soon as possible.
Undesirable; Chief Operating Officer decision required.	Within thirty (30) working days, a resolution should be developed and implemented.
Acceptable with review by Local Safety Committee and approval of Department Chief or Deputy, subject to review by the Operations Safety & Security Review Committee.	Within sixty (60) working days, the review process should be completed and accepted.

Acceptable with review by Safety Officers and approval by the Deputy or Chief Safety Officer.	As time permits by the responsible party.
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Although Table 16 defines specific criteria for reporting and resolution, actual hazards identified during daily operations are normally resolved or reduced to an acceptable level in a timely manner. Undesirable hazards that may require additional resources beyond normal daily process will be directed to the Chief Operating Officer. The criteria and resolution timetable noted was designed specifically for large scale construction projects and works well for that purpose.

3.5 Coordination with State Safety Oversight Program

3.5.1 Reporting

PRT will report hazards as defined in Section 3.4.2 Safety Risk Management Methodology of this document. Notifications will be made by System Safety staff to the RTSRP by phone or email noted here:

Phone	Email
717-433-2523	RA-PDRTSRPNOTIFY@pa.gov

Notifications will occur within the prescribed timeframe stated in Hazard Reporting Threshold Table 12 when learning of the hazard. PRT will maintain a Hazard log and tracked as defined in Section 3.4.2 of this document.

3.5.2 Corrective Action

PRT is required by the RTSRP to develop Corrective Action Plans (or CAPs) for various deficiencies and hazards identified through RTSRP on-site Safety and Security Reviews, Accident or Hazard Investigations, Internal Safety or Security Reviews, NTSB finding and other similar sources.

Specific events that may prompt Corrective Action Plans are defined in this section of this document. PRT or the RTSRP may identify need for additional Corrective Action Plans, outside this procedure. If the RTSRP identifies a need for a corrective action beyond those identified in this procedure, the RTSRP will notify the PRT in writing.

Corrective Action Plans will be prepared and formatted in accordance with these procedures. Timelines for actual implementation will vary according to the issue being corrected.

3.5.2.1 Cause for Initiation of Corrective Action Plan

RTSRP Safety or Security Review

Upon receipt of the final report for an RTSRP safety or security review PRT will have 30 calendar days to submit a corrective action plan to address the Finding(s) of Non-Compliance. PRT need not provide such a CAP update for individual RTSRP operations reviews and station observations, unless the RTSRP specifically requests such updates.

Safety Event Investigations

Regardless of which agency conducts the investigation process, the final report may contain causal factors, findings and recommendations for addressing deficiencies or unsafe conditions identified during the process. The resolution of these deficiencies will be the primary responsibility of PRT, with assistance provided by the RTSRP if requested. Any CAP's must be developed within 30 calendar days of the RTSRP's adoption of the investigation report.

Hazards

Regardless of which agency conducts the hazard investigation process (the PRT or RTSRP directly), the final report may result in CAP's for addressing deficiencies. This includes complaints from personnel or the public pertinent to the hazard investigation, all of which must be tracked until the investigation is complete. The resolution of these deficiencies will be the primary responsibility of the PRT with assistance provided by RTSRP, as may be required. Upon identification of a hazard, the PRT will have 30 days to develop a Corrective Action Plan to correct identified deficiencies.

Internal Safety or Security Review

If the PRT finds areas of non-compliance during internal audits of its PTASP, those areas of non-compliance will be remedied by PRT's Corrective Action Plan. The Corrective Action Plan must be formulated within 30 days. Likewise, if RTSRP rejects PRT's annual safety or security audit report, PRT will have 30 days to develop a Corrective Action Plan to correct identified deficiencies.

NTSB Investigations

If the National Transportation Safety Board (NTSB) conducts an investigation at PRT, it may issue a formal report with recommendations. Should this occur, the PRT will review the recommendations and determine their appropriateness. If the

PRT determines that a recommendation is appropriate, it will develop a corresponding Corrective Action Plan to address the recommendation.

If the PRT determines that a particular recommendation is not appropriate, the RTSRP may require it to conduct a supplemental hazard analysis or investigation to support this conclusion. A written record of all analyses of NTSB recommendations will be maintained.

Response to FTA Notifications

If the Federal Transit Administration (FTA) bulletin is applicable to the PRT, RTSRP may require PRT to develop a written record of all analyses of FTA recommendations and develop corresponding Corrective Action Plans to address recommendations.

Major Capital Projects

Preliminary Hazard Analyses, Threat and Vulnerability Assessments, and other studies that PRT must conduct of its major capital projects – such as a safety certification – may identify room for improvement. Such deficiencies must be addressed through development of formal CAP within 30 days after completion of the study.

Data/Trend Analysis

The PRT must conduct analysis of operational and maintenance data as well as repeated occurrences of hazards and incidents to determine the existence of trends. Upon discovery of a trend, the PRT must develop a CAP within 30 days.

Other

In the course of performing or reviewing on-site safety and security reviews, investigations, annual safety audits, or any other means by which RTSRP becomes aware of an unacceptable hazard that requires immediate attention, RTSRP will notify the PRT in writing of the identified hazard and direct the PRT to prepare a Corrective Action Plan. The timeframe for the Corrective Action Plan will be specified in the written notification from RTSRP.

3.5.2.2 Corrective Action Plan Required Components

Corrective Action Plans will include the following information:

- Date Identified – Date the CAP was generated.

- Source – What generated this CAP (ex. FTA reporting requirement, Accident/Incident, Hazard, etc.)
- Finding of Non-Compliance – Description of the deficiency or needed improvement.
- Risk Rating – Rating based upon hazard analysis.
- Corrective Action Plan – CAP must clearly address the precipitating event or hazard and outline proposed mitigations.
- Notes/Comments – RTA/RTSRP will enter progress and feedback on open CAP.
- Responsible Party – Individual/department responsible for CAP.
- CAP Issue Date – Date at which RTA submitted CAP to RTSRP.
- CAP Target Date – Proposed date at which the CAP will be completed.
- Transit Agency Status – Open, Awaiting Verification or Closed.

3.5.2.3 Corrective Action Plan Schedule & Format

The PRT will submit CAPs on two schedule bases:

1. The PRT will draft and submit Corrective Action Plans in accordance with procedure sections in this document, e.g., as part of an accident investigation final report, as part of an internal audit report, etc. will be logged in the VectorSolutions (formerly IndustrySafe) CAP log.
2. The PRT will, review the CAPs on an on-going basis, but not less than once per quarter each year, update any open findings in the VectorSolutions (formerly IndustrySafe) website when there has been new information or documentation relevant to the open finding.

3.5.2.4 RTSRP Corrective Action Plan Review & Approval

The RTSRP will review each Corrective Action Plan and evaluate it compared to the identified issue (accident cause, audit finding, hazard, etc.). Depending on the type of Corrective Action Plan and the issue it addresses, the RTSRP will ask PRT for additional supporting information, possibly including documentation, records, field demonstration of a revised process or procedure, or a follow-up audit or review. In most cases, at a minimum, the PRT should anticipate collecting and submitting supporting documentation to substantiate the CAP activity.

The RTSRP will approve Corrective Action Plans at three intervals:

1. **On initial submittal:** The RTSRP will review the Corrective Action Plan and looking at its appropriateness to the issue at hand, its timelines, its practicality, and similar factors, will approve the CAP if appropriate.

- 2. When updated or submitted as part of overall CAP log:** The RTSRP will review the Corrective Action Plan, any changes to its scope, timing, or approach, and its progress to date, and will approve the CAP if appropriate. During this phase, the RTSRP may ask for interim verification evidence or an interim demonstration of progress in the field.
- 3. When submitted with a closed or completed status:** The RTSRP will review the Corrective Action Plan's completeness, and will conduct a final verification of documentation, records, or process implementation, as appropriate to the particular issue. The RTSRP will approve the closure of the CAP or may request additional information or action.

The RTSRP will make all Corrective Action Plan approvals, as well as requests for additional CAP-related information, in writing.

If RTSRP rejects a Corrective Action Plan, the PRT will have 15 days to address noted deficiencies in the plan and submit a revised plan to RTSRP. The RTSRP, at its discretion, may arrange for a meeting with the PRT to discuss the noted deficiencies.

The RTSRP will modify the timeframes involved if needed for a particular Corrective Action Plan and will notify the PRT of any such changes.

4.0 SAFETY ASSURANCE

4.1 Safety Performance Monitoring and Measurement

This section provides the process used by PRT to ensure that its safety assurance activities support SMS implementation functioning as intended and that its safety risk management process is effective. Ultimately through the safety assurance process PRT should meet or exceed its safety objectives through the identification, assessment, mitigation, and monitoring of information.

Safety performance monitoring and measurement will include but not limited to: operations and maintenance data, employee reporting, safety audits, safety investigation, and external relevant information.

This assessment includes safety risks that may be identified in modifications to existing operations, systems, vehicles, and equipment, which do not require formal safety certification, but which may have safety impacts. This section also describes the safety and security certification process required by PRT to ensure that safety risks and hazards are adequately addressed prior to the initiation of passenger operations for New Starts and subsequent major capital projects to extend, rehabilitate, or modify an existing system, or to replace vehicles and equipment. In addition, the safety assurance activities describe the decision-making process PRT uses to determine if the formal safety and security certification process will be applied for a particular project. Lastly, this section includes a description of the management of change including configuration management and system change control process.

4.2 Management of Change

PRT through its' event data collection, safety committees, employee safety reporting, and other potential sources continually monitors its safety performance. The sufficiency of operations and maintenance practices and procedures that may introduce new hazards or impact safety performance are reviewed and monitored as described in 3.4.1, 3.4.2, 4.3.4, Table 18, 4.9.2 and 4.9.3. This same process is applied to safety risk mitigations that are suspected or have been identified as being ineffective, inappropriate, or not implemented as intended.

In addition, it is the intent of the PRT to review available data and information available and relevant to future major extensions, acquisition and integration of new rail vehicles and safety critical technologies into existing service and major safety critical redesign projects, excluding similar replacements into the safety certification process. It is also the intent of the PRT to notify the RTSRP of any projects and/or procurements that may require safety certification prior to the design phase.

As the transportation authority of the region, it is expected that PRT undergo its own continuous monitoring process to keep pace with the area it serves. Hence, any change or modification to the PRT's transportation equipment or system is monitored and controlled to assure that safety assurance is incorporated into the plans and designs of the modified equipment or system in accordance with the PRT's Engineering & Construction QA/QC Manual, Design Management Procedures Manual, Contract Terms and Conditions, Contract Technical Provisions and PRT's Configuration Management Plan.

Management of change is an agency-wide effort hence applies to all aspects of the agency and may include (but not limited to) design and implementation of new systems or other capital projects; changes of additions to existing system or service; changes to operations or maintenance procedures (existing or new); organizational changes such as changes in departmental responsibilities; procurement process changes, and changes to relevant laws, regulations, or policies.

Management of change applies to all PRT departments including operations, maintenance, training, capital projects and new starts, and data management.

The management of change process is to:

- Identify the proposed change
- Assess the proposed change
- Evaluate the proposed change

This process is undertaken by the department proposing the change with monitoring by the OSSRC.

Management of change is an ongoing process.

4.2.1 Coordination

Proposed system modifications are coordinated within the Engineering/ Technical Support Division by the Technical Support and Capital Programs Department, Procurement Department, Operations and Maintenance Departments, and reviewed by System Safety Unit and the affected department.

The Director of Technical Support and Capital Programs is tasked with ensuring that equipment purchased by PRT meet established safety requirements and that design requirements have been coordinated with all appropriate departments. The PRT Technical Support and Capital Programs Department coordinates major equipment rebuilds, repairs, and retrofits, in addition to monitoring the installation of facility systems and equipment to ensure compliance with contractual requirements and procedures. It performs the inspection and testing activities necessary to ensure that the equipment and operations result in the desired level of safety, and documents

equipment and facility modifications and informs affected staff of modifications. The Director of Technical Support and Capital Programs has the authority to stop work on all unauthorized modifications.

Design Management Procedure Manual applies to all engineering and construction capital projects. Configuration Management Plan applies to modifications and system changes relating to light rail vehicles and rail wayside equipment and systems that do not fall under the purview of the Design Management Procedures Manual.

4.2.2 Safety Reviews

A coordinated process for safety review (design, plan and procedure review) is required prior to any change or modification to the PRT transportation system, including operations. Safety reviews are performed to assess the compliance of the facility or equipment design with safety, fire, and environmental regulations and requirements in specifications and to ensure that the safety of existing PRT equipment and systems are not degraded.

The safety reviews for system modifications, must include the System Safety Unit. External review of system modifications by outside agencies such as FTA and PRTSRP are coordinated by the Chief Safety Officer.

Comments from safety review process are implemented or resolved prior to system modification and kept on file with disposition and supporting rationale. Unresolved comments and exceptions may be discussed and addressed in the OSSRC meeting.

4.2.3 Safety-Related Testing

Required safety-related tests are identified and documented during equipment planning and procurement. Risks and Hazards that become apparent during testing are reported and resolved either by equipment redesign, use of safety warnings, or the imposition of special procedures. The Chief Safety Officer, OSSRC, and other staff as necessary support Technical Support and Capital Programs, Operations and Maintenance Departments in this effort.

Equipment testing is primarily concerned with verifying that:

- The equipment can perform in PRT's operating environment while meeting required specifications.
- The equipment can be integrated with other equipment to provide dependable service.
- Personnel, procedures, and equipment can function safely together in normal, abnormal, and emergency conditions.

4.2.4 Acceptance

The process of final acceptance of new equipment and systems includes a resident engineer arranging and conducting a semi-final inspection after contractor notification that project is complete.

- The resident engineer conducts the semi-final inspection, accompanied by the contractor, members of construction management staff and representatives of PRT.
- All deficiencies are recorded and provided to the contractor. When corrected, the resident engineer arranges a pre-final inspection. Attendees will include the resident engineer, construction management staff, and appropriate PRT personnel.
- Any deficiencies found will be documented and provided to the contractor. Upon completion of the work by the contractor, a final inspection will be conducted.
- If no deficiencies are found during the final inspection, as conducted by the resident engineer, the contractor and PRT representatives, the resident engineer will issue a "recommendation to accept final inspection" to PRT.
- The "Issuance of Certificate Accepting the Final Inspection" will then be issued by the Chief Engineer.
- In addition, Safety and Security Certification plans are developed and implemented for major expansion projects in accordance with the respective FTA Full Funding Grant Agreement and FTA Circular - Safety and Security Management Guidance for Major Capital Projects C5800.1, Safety and Security Management and Final Verification of Safety and Security Certification.

All major modifications to the PRT transportation system require approval and sign-off by appropriate PRT management.

4.2.5 Hazard Management

The OSSRC, through its members and sub-committees, participates in design reviews and takes the lead role in ensuring that any safety risks/hazards associated with system expansion or major modifications are worked into the Safety Risk/Hazard Management Process. In this way, any accepted risks associated with such system changes will be documented and tracked from the outset.

4.3 Safety and Security Certification Program

PRT will conduct Safety and Security Certification of projects meeting the requirements referenced in FTA Circular - Safety and Security Management Guidance for Major Capital Projects C5800.1, Safety and Security Management and Final Verification of Safety and

Security Certification following the most current version of the FTA Handbook for Transit Safety and Security Certification.

4.3.1 Responsibilities

Endorsed by the CEO/AE, the PRT's Engineering/Technical Support Division is responsible for the PRT's capital improvement program and projects. This includes the planning phases, design/engineering phase, and the construction and close-out phases.

When a Safety and Security Certification Review Committee (SSCRC) is convened, it is chaired by the respective project manager or designee and is a subcommittee of the PRT's OSSRC. The SSCRC is established to monitor the safety and security certification process for major capital projects. The SSCRC comprised of contractors, project and PRT managers and staffers having expertise in systems engineering, facilities engineering, maintenance engineering, construction management, operations, systems integration, and system safety and security. A representative of the PRTSRP participates in SSCRC activities as an advisor.

The SSCRC is responsible for managing and coordinating all safety and security certification activities including review of safety and security-related tests, and other documentation submitted. The SSCRC chairperson or designee prepared and issued SSCRC meeting minutes that included a list of safety and security open items. The SSCRC made the initial review and recommendation for approval of:

- Safety and security certification plans including forms to be used in process
- Safety certifiable elements and sub-elements lists
- Draft safety and security verification checklists
- Completed safety and security verification checklists
- Assessment of existing PRT operations, maintenance and training programs adequacy, safety and security
- Safety and security test plans and procedures

The SSCRC also is responsible for monitoring the processing and retention of safety and security certification documentation.

4.3.2 Purpose

The purpose of the PRT Safety and Security Certification Program is to ensure that all PRT safety critical systems, rail vehicles, and major capital project systems, equipment, facilities, plans, procedures, and training programs are systematically reviewed for compliance with established safety and security design criteria requirements, and so verified prior to initiation into revenue service.

Safety and Security Certification will be conducted in accordance with the respective requirements of FTA Circular 5800.1 and/or the requirement of the current PRTSRP Procedures.

4.3.3 Objectives

The PRT Safety and Security Certification Program is modeled after FTA Safety and Security Handbook and numerous safety and security self-certification programs and plans adopted by similar light rail systems within North America involved in upgrading, expanding and modernizing existing systems, and constructing new start systems.

The following safety and security objectives are considered during all activities of all major projects and modifications that require safety certification.

Table 17 - Safety and Security Objectives

Objectives
Establish a formalized process that is sufficiently documented to verify compliance with safety and security requirements
Ensure that safety and security is an integral part of design, procurement, construction, testing and operations
Ensure that safety and security decisions are made by appropriate Project Managers, committees and responsible contractors
Ensure that safety and security hazards and vulnerabilities that become apparent during reviews, audits, inspections or system testing are resolved, either by redesign, use of safety/warning devices or by implementation and enforcement of special procedures
Ensure that outside response agencies, including the affected fire and police departments, are prepared to respond to normal, abnormal and emergency situations

4.3.4 Implementation

Safety and security certification for PRT major capital projects are implemented as a four-step process that includes:

- Engineering contractors certifying that each contract design is in conformance with the design criteria
- Construction contractors certifying that the work is completed in accordance with the contract requirements. The program manager and all contractors verifying that safety and security-related documentation has been accounted for
- The program manager and construction contractors verifying that PRT existing and new plans and procedures support safe operations and maintenance activities

- The PRT Safety and Security Certification Review Committee (SSCRC) verifying that the project has conformed to the project specific safety and security certification process established following verification of the design and construction documentation, new operations and maintenance procedures, and the integrated testing and training records.

A description of the activities required for implementing a safety and security certification program for a major capital project at the PRT is shown in the table below.

Table 18 - Milestones for Safety and Security Certification Activities

Activity	Planning	Preliminary Engineering	Final Design	Construction	Integrated Testing	Pre-Revenue	Operations
Document control	✓	→	→	→	→	→	→
Development of safety and security certification plan	✓	✓	→	→	→	→	→
Hazard and vulnerability assessment and resolution	✓	✓	→	→	→	→	→
Criteria and design review	✓	✓	→	→	→	→	→
Develop safety certifiable elements and sub-elements list	✓	✓	→	→	→	→	→
Evaluate and resolve fire/life safety issues and monitor fire/life safety compliance	✓	✓	→	→	→	→	→
Develop criteria conformance review checklists	✓	✓	→	→	→	→	→
Evaluate security provisions incorporated in system elements for adequacy and safety	✓	✓	→	→	→	→	→
Develop criteria conformance review checklists	✓	✓	→	→	→	→	→
Evaluate security provisions incorporated in system elements for adequacy and safety	✓	✓	✓	→	→	→	→
Manage safety, system security open items list	✓	✓	✓	→	→	→	→
Develop safety and security verification checklists	✓	✓	✓	→	→	→	→

Activity	Planning	Preliminary Engineering	Final Design	Construction	Integrated Testing	Pre-Revenue	Operations
Complete safety and security verification checklists for system	√	√	√	√	→	→	→
Complete safety and security verification checklists for civil work	√	√	√	√	→	→	→
Develop and implement contractor test plans and procedures	√	√	√	√	→	→	→
Contractor test reports/results	√	√	√	√	→	→	→
Develop integrated test plans and procedures	√	√	√	√	→	→	→
Manage integrated test program	√	√	√	√	→	→	→
Integrated test reports/results	√	√	√	√	√	→	→
Develop contractor's operations and maintenance procedures, and training plans/programs	√	√	√	√	√	→	→
Assess existing PRT operations and maintenance procedures and training plans/programs for adequacy and safety	√	√	√	√	√	√	→
Issuance of safety certification	√	√	√	√	√	√	→

√ Start of activity
→ Continue activity

4.3.5 Verification and Approval

Ultimate approval of the safety and security certification of a major capital project is by the PRT Safety and Security Certification Review Committee (SSCRC) prior to turning project elements over to PRT Operations for initiation into revenue service.

A pre-revenue assessment of an oversight nature is performed by the PRTSRP of the projects physical systems and facilities, operating and maintenance rules, procedures, and training, and actual operations.

Major capital projects are funded in part with federal funds and therefore the FTA has oversight and review responsibilities defined in their Readiness Review Program. The PRTSRP also reviews the safety of start-ups and system expansions of new and

existing fixed guideways within the Commonwealth of Pennsylvania. Therefore, they will be active in the oversight of the safety and security certification process.

To ensure that PRT management and staff, and others as appropriate remained informed of the status of the safety and security certification effort, progress reports are prepared by the certification committee and submitted to SSCRC for review and approval. The reports advise the SSCRC of the following:

- Checklists and Notice of Verification Reports completed during report period
- Problems encountered and restrictions enforced
- Major modifications made to Certifiable Elements and Sub-Elements List
- Checklists and Notice of Safety and Security Verification Reports expected to be completed in upcoming report period
- Certification progress to date

Safety and Security Certification at PRT is defined as the process of addressing conditions that could result in harm – whether unintentional (safety) or intentional (security), and verifying satisfactory compliance with the PRT PTASP and SEPP, appropriate codes, guidelines, standards, and safety and security-related design criteria and technical provisions.

Certification for safety and security is not contractual acceptance. Contractual acceptance is defined as an action by an authorized representative of the transit agency by which the agency assumes full or partial ownership of the delivered product as complete or partial performance of a contract. Contractual acceptance does not constitute safety and security certification, and safety and security certification need not imply acceptance with respect to contract performance.

4.4 Configuration Management

4.4.1 Description of Process

The PRT's Configuration Management (CM) is the systemic engineering process to provide visibility and control of an asset's functional and physical attributes within design and operational requirements throughout its service of life. The process facilitates orderly management of information and changes for such beneficial purposes as to revise capability; improve performance, reliability, or maintainability; extend service life; reduce cost; reduce risk and liability; or correct defect.

Changes to the asset are proposed, evaluated, and implemented using a standardized, systemic approach that ensures consistency. Proposed changes are evaluated in terms of their anticipated impact on the entire system and interactions therefrom. CM process ensures that changes are properly documented and reflect current asset configuration.

The PRT's Configuration Management Process is a seven (7) step process consisting of Initiation, Analysis/Planning, Design, Testing, Formal Notifications, Implementation and Documentation. For more detailed information on the seven steps, please refer to PRT's Configuration Management Plan dated February 2018. In addition, PRT will use or follow its SRM Process described previously.

Required configuration information is maintained and tracked by documenting test/modified equipment as well as relevant serial numbers and dates of installation of standard equipment. The Technical Support/Capital Programs Department is responsible for storing and retrieving facilities and equipment configuration information as well as informing affected staff of configuration changes in a timely manner, and keeping the data current. The Manager of Railcar Maintenance, at South Hills Village Rail Center, is responsible for maintaining configuration of LRVs and informing affected staff of configuration changes in a timely manner. The Main Shop Management team located at Manchester is responsible for maintaining configuration of bus equipment and informing affected staff of configuration changes in a timely manner.

4.4.2 Authority for Change and Notification

The Engineering and Construction QA/QC Manual and Contract Technical Provisions contain the specific elements for change orders as they apply to construction and the purchase of new systems and vehicles.

4.5 Safety Performance Monitoring and Measurement

4.5.1 Safety Performance Indicators and Targets

PRT's performance targets are based on the safety performance criteria and state of good repair standards set out in the National Public Transportation Safety Plan as required in 49 CFR 670, Subpart D.

PRT Safety Performance Targets are set in coordination with PRT's Metropolitan Planning Organization, the Southwestern Pennsylvania Commission. PRT's Chief Safety Officer with assistance from Safety staff proposes Safety Performance Targets and transmits them to Southwestern Pennsylvania Commission transit/safety staff for review. Discussions may be held if needed to arrive at targets that are acceptable to both PRT and SPC. SPC staff and the Policy Advisory Committee then review and approve the targets. PRT's PTASP Safety Targets are incorporated into the region's Long Range Transportation planning process by this endorsement and approval of the Southwestern Pennsylvania Commission. PRT will also make performance targets available to the State to aid in the planning process.

Safety performance targets include Fatalities for each mode, Total Injuries, Safety Events and System Reliability. The four criteria are based upon the National Transit Database (NTD) reporting FY 2021-2022 totals and a rate established based upon one (1) million vehicle revenue miles traveled, unless otherwise noted. These FY 2022-2023 targets were established on a rolling total from five (5) years of NTD reporting data relative to each category. This data and supporting data are provided to the PRT Board and the RTSRP at least annually.

4.5.2 Safety Performance Measures/Targets by Mode

Table 19 - Rail Transit and Incline Plane Performance Measures

MEASURE	FY 21-22 TOTAL NUMBER	FY 21-22 RATE (Per 1 Million VRM)	FY 22-23 TARGET (TOTAL)	FY 22-23 TARGET RATE (Per 1 Million VRM)
FATALITIES	0	0	0	0
INJURIES	2	1.3	2	1.3
SAFETY EVENTS	8	5.4	10	6.7
SYSTEM RELIABILITY (VRM Between Failures)	331	4,451	252	5,592

Table 20 - Bus Transit Performance Measures

MEASURE	FY 21-22 TOTAL NUMBER	FY 21-22 RATE (Per 1 Million VRM)	FY22-23 TARGET (TOTAL)	FY 22-23 TARGET RATE (Per 1 Million VRM)
FATALITIES	0	0	1	.05
INJURIES	55	2.8	72	3.6
SAFETY EVENTS	77	3.9	71	3.5
SYSTEM RELIABILITY (VRM Between Failures)	2,772	6,901	1,868	10,706

Table 21 - Paratransit (ACCESS) Performance Measures

MEASURE	FY 21-22 TOTAL NUMBER	FY 21-22 RATE (Per 100,000 VRM)	FY 22-23 TARGET (TOTAL)	FY 22-23 TARGET RATE (Per 100,000 VRM)
FATALITIES	0	0	0	0
INJURIES	28	0.53	25	0.32
SAFETY EVENTS	33	0.62	30	0.39
SYSTEM RELIABILITY (VRM Between Failures)	252	20,938	195	39,364

System Safety will report the following data to the PRT Board at least annually:

- **Fatalities** – total number of reportable fatalities and rate per million revenue vehicle miles, by mode, regardless of the cause of the fatality. *(NPTSP Part 670) (Categorized by customer, employee, contractor.)*
- **Total Injury Rate** – based on National Transit Database (NTD) Reporting Criteria, total number of reportable customer and employee injuries and rate per million vehicle revenue miles by mode, regardless of the cause of the injury. *(NPTSP Part 670)*
- **Safety Events (Rail transit)** – total number of reportable events and rate per million light rail vehicle revenue miles per NTD reportable events. *(NPTSP Part 670)*
- **Safety Events (Bus)** – total number of events and rate per million vehicle revenue miles by each separate mode (bus and paratransit) per NTD reportable events. *(NPTSP Part 670)*
- **System Reliability** – measured as revenue miles operated divided by the number of major mechanical failures. (Also known as State of Good Repair) *(NPTSP Part 670)*

4.6 Safety Assurance - Safety Performance Monitoring and Continuous Improvement

4.6.1 Internal Audit - Safety Audit Process

Planned and scheduled internal safety audits are performed to monitor safety performance, an SMS subcomponent of the Safety Assurance process, and to evaluate compliance with safety management, including identification of departments and functions subject to review; responsibility for scheduling reviews; process for conducting reviews, including the development of checklists and procedures and the issuing of findings; review of reporting requirements; tracking the status of implemented recommendations; and coordination with RTSRP, including annual internal audit report and safety certification. There is a requirement that reviewers are independent from the first line of supervision who are responsible for the activity being reviewed and for the use of written checklists.

4.6.1.1 Department and Functions Subject to Review

The PRT Internal Safety Audit Program encompasses the annual audits required by RTSRP (49 CFR 673.27 and/or supplemented by RTSRP requirements). From time-to-time PRT will also be subjected to other safety audits required by the RTSRP, FTA and other agencies or deemed warranted by PRT management. The Internal Safety Audit Procedure will indicate that each area is assessed for all four components of SMS compliance (Safety Policy, Safety Risk, Safety Assurance and Safety Promotion), and within each area, all elements that apply to the functional area per the PTASP. Areas that will be audited internally at least once during a three-year cycle and are included in the Internal Audit Department process are summarized in list below:

- Public Information (Communications)
- System Safety
- Emergency Management
- Procurement & Inventory Management
- Information Technology
- Planning and Scheduling
- Facilities and Rail Maintenance
- Infrastructure Maintenance
- Fare Collection/Revenue
- Vehicle Maintenance
- Transportation Operations
- ADA
- Drug and Alcohol
- Engineering and Capital Projects
- Training

Internal audit reviewers must be independent from the first line of supervision responsible for the activity being reviewed.

The following audit items will be audited by PRT personnel other than System Safety Unit:

- SMS Policy statement, chief executive endorsement, SMS program authority
- SMS program goals and objectives, management responsibilities for completion
- Overview of management structure
- Plan review and modification
- PTASP update and change control process
- PTASP Implementation activities performed by System Safety Unit

4.6.1.2 Purpose and Objectives of Safety Audits

The purpose of the PRT Internal Safety Audit Process is to establish an audit system for continual measurement, improvement, and appraisal of the administrative process with regard to system safety. Audits seek to discover program compliance as well as imperfect performance that may result in accidents/incidents with an adverse effect on PRT, its customers, employees, and the general public. This process and its scope encompass all elements of the PRT PTASP as required by 49 CFR 673.27.

The objectives of the Internal Safety Audit include the following:

- To provide a system to independently and objectively measure and quantify work being done to manage and control hazards
- To provide a system to guide the development and improvement of the Public Transportation Agency Safety Plan
- To provide a complete or total systematic approach to system safety management

4.6.1.3 RTSRP Requirement

The PennDOT RTSRP requires the PRT to develop and document a process for the performance of on-going internal safety audits to assess implementation of the PTASP.

The internal safety audit process must at a minimum:

- Describe a process used by the PRT to determine if all identified elements of its Public Transportation Agency Safety Plan (PTASP) and Security &

Emergency Preparedness Plan (SEPP) are performing as intended.

- Determine if areas of PTASP or SEPP non-compliance and hazards are being identified in a timely manner; and
- Ensure that all elements of the PTASP and SEPP are reviewed in an on-going manner and over a three-year cycle.

Audit Cycle/Schedule Required by RTSRP

On or before December 1 of each year, the PRT Chief Safety Officer submits to the RTSRP a schedule of safety and security internal audits, including an outline for audit activity over the next three years, and specific scheduling details (at a minimum the month or quarter of anticipated schedule) for any audits in the next calendar year. At a minimum, the PRT is required to notify RTSRP at least 30 days before the conduct of internal safety or security audits. As schedule information becomes more certain, the PRT Chief Safety Officer updates the RTSRP as soon as possible via email or phone. The RTSRP will notify the PRT of its intention to participate in the audits.

4.6.1.4 Responsibility for Scheduling Reviews

The PRT Chief Safety Officer is responsible for developing and distributing standard procedures to be followed when conducting planned/formal audits. The reviewed department is informed of the audit/review and provided with information regarding the purpose, scope, and content of the planned safety audit/review. Preliminary findings are communicated as soon as practicable to enable expeditious corrective action. Follow-up audits/reviews may be conducted without advance notice.

Internal department audits are conducted by department management as described by established procedure and/or at the discretion of the division's group manager or in special situations as requested by departmental directors.

The Bus Main Shop, responsible for the quality assurance function, conducts annual audits of all bus divisions' maintenance departments. Audits are designed to review maintenance schedules defined in Section 2 of this document as well as other pertinent issues.

4.6.1.5 PRT Safety Audit Processes and Procedures

All PRT departments are subjected to safety audits that include fire/life safety issues and/or those areas defined by this Plan. The Chief Safety Officer assisted by the OSSRC will coordinate with other PRT departments and stakeholders to develop, train, and test PRT performance in emergency and operational procedures, ensure that selected fire/life safety-related equipment is in proper

order, and determine that associated personnel are appropriately trained. Testing and inspections of fire/life safety equipment are performed in accordance with applicable codes.

Responsible departments are expected to document inspections, testing, training, reports of unsafe conditions, accidents, injuries, investigations, procedures, and other records as necessary for the audit. Certain critical operations that require more rigorous review/audit include training and maintenance programs. Additional details pertaining to inspection frequencies and procedures can be found in the LRT/Rail Systems/Facilities/Operations plan included by reference and maintained by the Director of Rail Service Delivery.

Interviews with Knowledgeable People - Auditor(s) may conduct interviews with PRT personnel knowledgeable of the Public Transportation Agency Safety Plan to identify activities allegedly in place at the audited unit. The interviews consist of a dialogue utilizing established guideline information in the audit and/or specific questions pertinent to the audit.

Formal documentation of interviews, if conducted, as well as all aspects of the audit format, is maintained by the auditor. Program deficiencies are noted in the working audit for inclusion in the final written report. A total overall score is calculated by the auditor(s) as a percent (%) attainment.

Verification of Information - Auditor(s) focus on three major methods of checking actual existence and effectiveness of the audited program activities:

- Record checks (defects, near misses, safety events, preventive maintenance inspection reports, rule violations)
- Site interviews (operator, maintenance, and other department interviews)
- Physical inspections (inspections of rolling stock, equipment, infrastructure, and facilities)

Record checks, if conducted, are performed during the interview process described above or separately by the auditor. At times, it is necessary to conduct record checks at other or field locations due to the diversity of various PRT operations.

Record Checks - Auditor(s) select records from available documentation to verify answers provided to audit questions. For example, in assessing planned inspections, where the procedure requires quarterly physical inspections by use of a checklist, files from the previous year and up to date for current year should be checked for procedure compliance and completeness.

Employee Interviews - When conducting comprehensive audits, on-site interviews

may include: senior and middle managers; front-line supervisors; and hourly employees. Interview questions should be designed to verify that alleged program activities are in place and understood.

Physical Inspections - Part three of the audit verification process is physical inspection. Physical inspections are part of the comprehensive audit process and will be as thorough as possible when conducting baseline audits. Spot inspections of physical activity or conditions may also be part of the audit process or used as a follow-up tool for deficiencies found. After baselines are established, the scope of subsequent audits may narrow in their focus to direct inspection activity on known deficiencies and/or program compliance. Physical inspection checklists are part of the working audit and will be prepared in advance and provided to the PRTSRP.

Physical inspections, as well as other elements of the audit, are measurable. Therefore, the end result of these inspections is a percent (%) attainment score for those items checked and found in working or as-designed condition.

Audit Findings

The Chief Safety Officer is responsible for the direction of the reviews and audits of PRT departments, sections or units, and contractors to determine performance related to system safety goals and activities. Internal and external audit findings that identify existing hazards will be incorporated into the SMS hazard management process for assessment and classification. Audit guidelines will be developed by the Chief Safety Officer to measure the success and effectiveness of the implementation of safety policies, procedures, and requirements. Comparison of the available data to the safety performance targets will provide a measurement of the effectiveness of the safety program.

All audits are fully documented and reported. Upon completion of each internal safety audit, the System Safety Department will issue a report of the results, specify any areas of deficiency, make recommendations, identify corrective actions, and issue copies of the report to the affected department heads.

Each department manager is responsible for carrying out the approved recommendations and action plans resulting from an internal safety audit as determined by the OSSRC and monitoring its effectiveness and resulting performance regarding safety. Any manager who foresees or encounters a problem concerning compliance with implementation within the established time frame is to inform the Chief Safety Officer or his designee. A process will be established by the OSSRC to address and resolve all implementation issues.

Individual Audit Reports

PRT System Safety will submit individual audit reports to the RTSRP within 45 days of the date on which the audit was completed.

Annual Report

On or before February 1st of each year, PRT System Safety department will submit an annual report to the RTSRP that documents the internal safety audits performed in the previous calendar year. The safety and security audit reports will be submitted separately. Individual audit reports previously submitted will not be resubmitted but referenced in the annual report as being part of the internal safety audit process. The annual report will include the following elements:

- A summary of corrective actions generated by each audit
- The status of each corrective action plan
- A list of all audits included in original schedule for the year, indicating dates each audit was completed or identifying the audit as incomplete
- A summary of significant audit findings
- A statement by the PRT's Chief Executive Officer certifying compliance with the PTASP or identifying areas of noncompliance and activities the PRT will undertake to achieve compliance

Within 30 days of receipt, RTSRP will issue a written response either accepting or rejecting the annual safety audit report. If the RTSRP rejects the report, the PRT will address the noted deficiencies and requested changes in the report within 15 days and submit a revised report to RTSRP. The RTSRP, at its discretion or at the PRT's request may arrange for a meeting with the PRT to discuss the noted deficiencies and requested changes.

If the annual safety report is accepted by the RTSRP, then no further actions relative to the annual safety audit report will be required by the RTSRP for that annual period. RTSRP may require other information or analysis that relates to the safety audit process, as part of some other aspect of the state oversight program.

In the event the PRT objects to a noted deficiency or requested change from RTSRP it will state its objections and suggest alternatives within 5 days. RTSRP and the PRT shall review the objections and suggested alternatives and agree to an appropriate course of action within 15 days. The revised and updated report will be submitted to the RTSRP for review and approval within 30 days after agreement on a course of action.

The PRT will transmit the Annual Safety Audit Report to RTSRP in a format agreed to by the RTSRP Program Manager (electronic or hard copy). Once approved, a

final version of the report will be submitted in an unalterable format with all PRT approval signatures visible.

Corrective Actions

If PRT finds areas of non-compliance meeting the unacceptable hazard rating during internal audits of its Public Transportation Agency Safety Plan, Security and Emergency Preparedness Plan, or corrective actions noted in After Action Reports, those unacceptable hazards will be tracked in the VectorSolutions (formerly IndustrySafe) software managed by System Safety. Items not meeting the unacceptable hazard rating are tracked in the Audit Findings Tracking Log which is managed by System Safety. Safety & Security issues are also brought to the monthly Operations Safety and Security Review Committee OSSRC, for discussion and resolution. Issues brought to the OSSRC are tracked in the monthly minutes until closed by the committee. The Corrective Action Plan must be formulated within 30 days.

The Corrective Action Plan will include the information provided in section 3.5.2.2.

PRT will forward the corrective action to RTSRP for approval. RTSRP will notify the transit agency in writing of its acceptance or rejection in within 15 days after receipt of the Corrective Action Plan.

Tracking and Status of Implemented Recommendations

All corrective actions and recommendations not meeting an unacceptable hazard rating will be tracked by the System Safety Department for compliance using the audit findings tracking log. This log is updated monthly by System Safety.

Hazards identified during internal audit process are to be addressed and resolved by the responsible department or unit utilizing routine corrective measures. Unacceptable hazards identified during internal audits will be tracked in the Corrective Action Plan log to resolution.

Any unacceptable hazardous conditions (UHC) found as a result of these audits will be appropriately documented and logged, and the PRTSRP will be notified as defined by this PTASP. The Chief Safety Officer or his designee will coordinate this effort.

4.7 Accident/Incident Investigation Reporting Section Overview

This section describes the process used by PRT to perform accident notification, investigation and reporting, including notification thresholds for internal and external organizations, such as the FTA & RTSRP; accident investigation process and procedures;

the process used to develop, implement, and track corrective actions that address investigation findings; reporting to internal and external organizations; and coordination with RTSRP, the oversight agency. Thorough and detailed investigations serve to improve and provide continuous improvements for PRT employees, customers and the general public.

The processes described in this section facilitate coordination and define the activities of the various PRT departments involved in accident/incident investigation. The processes also enhance the safety of PRT patrons and employees, and the protection of PRT assets by conducting thorough investigations and determining probable cause(s) with recommendations on how to prevent reoccurrence. If additional information is required, see PRT's most recent version of the Incident/Accident Investigation Procedures Manual and Section 3 of this document, Hazard Management Process.

4.8 Accident/Incident Notification Procedures

When notified of an accident/incident, BTO/RTO must determine and act upon the following:

- Determine whether there are any injuries.
- Determine appropriate assistance: notify Transit Police to contact appropriate ambulance, fire department, and state/local police departments.
- Determine exact location of accident/incident.
- Dispatch Road Operations supervisor and Transit Police and Security Services.
- Have the operator take steps to secure witness "courtesy cards."
- Deploy additional emergency respondents as requested by site team. (Police Department)
- With assistance from Road Operations Supervisor at the scene of the accident, notify and coordinate bus/rail operations as deemed necessary by the situation.

4.8.1 Internal Notification

BTO/RTO upon notification from the site team of the accident classification will begin the following notifications:

Non-Serious Accident (Class I) - Follow normal departmental procedures (i.e., D.O.R., etc.). Send notification via PRT's web-based alert system.

State (NTD) Reportable (Class II) - Follow normal departmental procedures (i.e., D.O.R., etc.). Send notification via PRT's web-based alert system.

Serious Accident (Class III) - In the event of a serious accident as defined in PRT's Incident/Accident Investigation Procedures or other unusual circumstances that may result in media coverage, it is absolutely vital that designated management personnel

be notified as quickly and efficiently as possible. However, this should not be done until all appropriate emergency response personnel have been contacted. Accordingly, the following personnel must be notified via PRT's alerting system or manually by telephone calls in the event of an alerting system failure.

- Director of Road Operations – Bus/Rail
- Director of Rail Service Delivery - Rail
- Chief Safety Officer
- Director of Claims
- Deputy Chief Safety Officer
- Chief Communications Officer

To the extent possible, provide the following information:

- Specific location and type of accident
- Time accident occurred
- Route and direction the bus/LRV was traveling
- Extent of injuries and property damage
- PRT and public authorities responding to the scene
- Name and badge number of operators involved
- Bus/LRV/Vehicle number(s).
- Any other relevant information

Documentation Requirements – BTO/RTO must maintain department logs that identifies the date, time, person(s) notified or paged, and time calls were returned.

Table 22 - External Notification

Agency	Requirements
State (NTD) Reportable	An injury requiring transport to hospital or vehicle tow. BTO/RTO makes the necessary internal notifications via the Alert system. Notification is made externally through the Pennsylvania State Police Accident Database via Transit Police reporting system.

Agency	Requirements
Rail Transit Safety Review Program (RTSRP) Accident/Incident	<p>For those systems and modes covered under the PennDOT RTSRP, the PRT must notify the FTA & Rail Transit Safety Review Program within two (2) hours of an accident meeting the below criteria. See section 4.1.3 below for a more detailed explanation of the threshold reporting requirements. For reporting purposes, accident shall be defined as any incident involving a transit vehicle or taking place on property controlled by the PRT where one or more of the following occurs:</p> <ol style="list-style-type: none"> 1. Fatality -A death or suicide confirmed within 30 calendar days of a reportable event. Excludes deaths in or on a transit property that are a result of illness or other natural causes; 2. Serious Injury to a person (See Definitions Section); 3. A Collision involving a rail transit vehicle; (see below table) 4. An Evacuation due to life safety reasons; 5. A Runaway Train; 6. Any Derailment of a rail transit vehicle, at any location, whatever the cause;
National Transportation Safety (NTSB)	<p>The National Transportation Safety Board (NTSB) shall be notified via the National Response Center of the following railroad accidents no later than two (2) hours after an accident that results in:</p> <ul style="list-style-type: none"> • A passenger or employee fatality or serious injury to two or more crew members or passengers requiring admission to a hospital • The evacuation of a passenger train • Damage to a tank car or container resulting in release of hazardous materials or involving evacuation of the general public • A fatality at a grade crossing <p>The NTSB shall be notified via the National Response Center of the following railroad accidents no later than four (4) hours after an accident that results in:</p> <ul style="list-style-type: none"> • Damage of \$150,000 or more for repairs, of the current replacement cost, to railroad and non-railroad property; • Damage of \$25,000 or more to a passenger train and railroad and non-railroad property • The NTSB shall be notified of any bus accident involving a fatality of a passenger no later than two (2) hours after the accident. • Any accident involving a fatality of a passenger.

Agency	Requirements
Public Utility Commission	<p>Shall be notified of any bus accident resulting in a fatality as soon as possible. The bus and/or operator shall not continue in service until released by the Public Utility Commission. The thirty-day fatality rule shall apply.</p> <p>(Act 21 of 2001, amended the Pennsylvania Vehicle Code by adding subsection 4704 (c) (2) which states:</p> <p>In the event a motor carrier vehicle or mass transit vehicle is involved in an accident that causes the death of the vehicle operator or another person, the motor carrier vehicle or mass transit vehicle shall be inspected by a qualified Commonwealth employee, as designated by the department in accordance with subsection (f), before the vehicle or driver will be allowed to continue operation.</p>
Pennsylvania Department of Labor and Industry (Elevator Division)	<p>An owner of an elevator or lifting device or an authorized agent shall submit an accident report to the Department if the elevator or lifting device is involved in an accident resulting in any of the following:</p> <ol style="list-style-type: none"> 1. Fatal injury or hospitalization to a person 2. Damage to the elevator or lifting device rendering it unsafe under § 403.84 relating to unsafe building, structure or equipment) <ul style="list-style-type: none"> • The owner or authorized representative shall submit the accident report on a Department-prescribed form, which must be received by the Department within twenty-four hours of the accident • The Department may order an investigation of the accident • An elevator or lifting device that was involved in a fatal accident may not return to operation until the Department provides approval • An elevator or lifting device involved in a non-fatal accident resulting from mechanical or electrical failure may not return to operation until the Department provides approval

4.8.2 FTA and RTSRP Notification

In order to notify the FTA and RTSRP of an accident which meet the established reporting requirements, the PRT must contact the on-call representative for each agency using either email or phone. The PRT's preferred method is via email, however the contact information for both methods are listed below.

FTA Phone	FTA Email
202-366-1863	TOC-01@dot.gov

RTSRP Phone	RTSRP Email
717-433-2523	RA-PDRTSRPNOTIFY@pa.gov

Initial report notification must include at least the following preliminary basic information to be accepted by the RTSRP:

- The caller's name and transit system;
- Event type (e.g., accident, incident, or occurrence);
- Time of the event;
- Date of the event;
- Event location (in the form of the closest transit station, intersection, or address)
- Transit vehicle line/route, direction of travel, and lead vehicle number;
- Information about any other vehicles involved; and
- Number of injuries or fatalities as defined above.

4.9 Accident/Incident Investigation Process and Procedures

4.9.1 Process

Due to the technical nature of many PRT systems (Incline, LRV's, Signals etc.), a team with a variety of expertise is often required to investigate and document accident cause and analysis. For the purpose of this Plan, three primary teams and their initial responsibilities will be identified. The inclusion of other PRT departments/personnel is available at the request of the investigation teams.

4.9.1.1 Accident Investigation Site Team

The Accident Investigation Site Team consisting of Transit Police and/or Road Operations personnel will be the primary responder to all Class II and III accidents involving PRT vehicles (bus/rail/support) and property. It will be the responsibility of the site team to conduct the initial assessment of the accident, coordinate required emergency response, and begin notification and investigation processes.

4.9.1.2 Accident Investigation Oversight Team

The Accident Investigation Oversight Team consists of the following personnel: Chief Safety Officer (Chairman), Chief of Police, Director of Road Operations, Chief Legal Officer, Chief Operating Officer, and Director of Claims.

The Accident Investigation Oversight Team is responsible for ensuring that all necessary reports and documents are gathered; notifying federal and state agencies when required; initiating any follow-up investigations or interviews; and preparing, writing, and distributing the final, official report. In addition, the

Accident Investigation Oversight Team is responsible for ensuring that appropriate accident data is entered into the Hazard Management process. The Accident Investigation Oversight Team is notified and responds to all fatal accidents involving PRT rights-of-way. Investigations of serious or fatal accidents on public streets will be at the discretion of the Chairman of the Accident Investigation Oversight Team in consultation with the Director of Claims and/or by request of Senior Staff, specifically, the Chief Executive Officer, Operating Officer or General Counsel.

4.9.1.3 Derailment Committee

The Derailment Committee is responsible for investigating system derailments as defined by this procedure, gathering all necessary documents and writing and distributing of the final report. At a minimum, each report should include conditions, description of occurrence, investigation, probable cause and recommendations to avoid future occurrence. The derailment committee will consist of the following:

- Chief Safety Officer (Chairman)
- Director of Rail Service Delivery
- Manager of LRT Systems and Power
- Manager of Track and Way
- Assistant Manager of Way
- Manager of Railcar Maintenance
- Project Coordinator (Technical Support/Lead Investigator)
- Engineering Technicians, Technical Support
- Rail Safety Officer (as needed)
- Deputy Chief Safety Officer
- Manager Capital Programs Systems
- Director of Road Operations

4.9.1.4 Training

The following PRT employees involved in the accident/incident investigation processes are trained on the contents of this procedure. Department Directors will be responsible to ensure training of appropriate staff.

- All Transit police personnel to include dispatchers.
- All Road Operations personnel, including BTO/RTO.
- All System Safety Department/Safety Officers
- Other technical staff as deemed necessary by the Accident Investigation Oversight Team

Select members of the above group will be designated to attend training outside of the PRT to be certified and/or remain current in the application of accident investigation techniques. The Federal Transit Administration's Transportation Safety Institute, the Pennsylvania State Police, and other federal, state and local police agencies will be a source of this training. The Accident Investigation Oversight Team members will budget for, coordinate, and ensure attendance of their respective designated personnel.

4.9.2 Accident/Incident Reporting and Documentation

As a result of the on-site investigation, many issues may remain in question, unresolved, or to be completed. This is often the case involving serious accidents and/or those requiring formal reports to the Pennsylvania Rail Transit Safety Review Program (PRTSRP) or the National Transportation Safety Board (NTSB). Accidents requiring state or federal reporting criteria are coordinated and prepared as defined in PRT Incident/Accident Investigation Procedures. The degree of follow-up documentation will vary from one accident to the next. The following issues may require documentation as determined by accident severity, employee discipline, or routine procedures as follows:

- Compliance with Operating Rules/Procedures - Operator compliance to PRT's rules and procedures can be an issue in all accident investigations. Directors of Service and employee relation representatives are responsible for review of each case. Violations of Pennsylvania Vehicle Code will be at the discretion of Transit Police and Security Services and/or other law enforcement agencies. In any case, accident investigation reports will be provided to division directors upon request.
- Follow-up Interviews - Accidents involving multiple injuries, multiple witnesses, or clarification of statements may require follow-up interviews. Transit Police and Security Services, with assistance from Claims Investigations, if required, will be responsible for this action. Serious accidents involving the Accident Oversight Team may request follow-up interviews and/or conduct them at its discretion.
- Employee Records - Employee records can provide information regarding past performance, complaints, commendations and general attendance. Training records certify employee knowledge of rules and procedures. Work history such as; workdays, pass days, and schedule for the day in question also provide necessary information to assist with determining possible fatigue. All the above-mentioned items should be reviewed in cases involving serious accidents and other accidents where individual items of employee record come into question.
- Post-Accident Drug & Alcohol Testing - All PRT operators will be post-accident tested as defined by PRT's Drug & Alcohol Post Accident Testing procedures. The results of such testing are required in the case of NTSB, State and serious

accident investigations conducted by the Accident Investigation Oversight Team. As such, the chairman of the Accident Investigation Oversight Team (Chief Safety Officer) will be provided with Post Accident Drug & Alcohol test results, upon request.

- Vehicle/Equipment Inspections - All PRT vehicles involved in a serious accident will be impounded until released by the Accident Investigation Oversight Team. This action is necessary for follow-up investigation/testing and required for those accidents involving NTSB/PUC notification.
- Post-Accident in-shop inspections will be conducted with all rail/bus equipment when deemed necessary by the Accident Investigation Oversight Team or by Road Operations, when potential vehicle operation issues are a concern. Vehicle maintenance records are provided to the Accident Investigation Team and are used for accident analysis and reporting.
- Track/Overhead maintenance records are reviewed, in addition to any outside consultant/vendor analysis reports.
- Repair estimates on vehicles involved in the accident are documented in final report for serious accidents.
- Simulation Tests - Simulation tests may be conducted when deemed necessary by the Accident Investigation Oversight Team, but only under controlled situations that ensure the safety of personnel and equipment.

4.9.3 Accident Analysis

In preparation for the final report, investigators attempt to reconstruct the events as follows:

- Who was involved?
- What events occurred?
- How the events happened?
- Identify causal factor(s)?

Sequence of events for off-site portion of accident/incident investigations:

- Analysis of off-site data collection
- Documentation of findings
- Determining conclusions
- Determining causal factors
- Entering relevant data into Hazard Resolution process
- Recommendations

4.10 Safety Data Acquisition and Analysis

This function involves acquiring safety-related data from various sources and analyzing, trending, and distributing that data to inform PRT management and staff of system

operation and performance. In some instances, the acquired data is used to meet external (FTA and PennDOT) reporting requirements. Trend analysis is performed on the acquired data as a means of identifying and mitigating to the lowest reasonable level causes of accidents and occupational injuries. Included in these analyses are right-of-way and roadway conditions, equipment type, procedures, human factors, environmental conditions, and other factors that might contribute to accidental situations.

4.10.1 Data Acquisition

Safety data is collected from numerous sources by the System Safety Department, sources include but are not limited to:

- Daily Occurrence Reports (DOR)
- Accident/Incident Reports
- Safety Meetings
- Physical Inspections
- Insurance Inspection Reports
- Claims Reports
- Employee Hazard/Safety Event Reports
- Passenger Safety Concerns/Reports
- General Public Concerns/Reports
- Contractor Hazard/Safety Event Reports
- Near Miss Reporting System
- Municipal Official(s) Safety Concerns/Reports
- Transit Police Safety Concerns/Reports
- FTA Bulletins
- Pennsylvania Rail Safety Review Program (PRTSRP)
- APTA/NTSB Reports/Publications
- Homeland Security Alerts
- Accident Statistics
- Employee Occupational Injury Reports

Safety data collection also involves obtaining technical information for use in systems development of program elements. Sources for such technical data include but are not limited to:

- Occupational Safety and Health Administration (OSHA)
- Department of Homeland Security (DHS)
- Environmental Protection Agency (EPA)
- American National Standards Institute (ANSI)
- National Fire Protection Association (NFPA)
- American Society for Testing and Materials (ASTM)
- Pennsylvania Administrative Code
- Safety Data Sheets (SDS)

- American Public Transit Association (APTA)
- Federal Transit Administration (FTA)
- Pennsylvania Rail Transit Safety Review Program (PRTSRP)
- National Transportation Institute (NTI)
- Transportation Security Administration (TSA)

Other technical data sources include building codes and professional society guidelines. Safety data is exchanged between PRT and other transit systems. PRT's safety staff takes the lead role in this function.

4.10.2 Data Analysis

The System Safety Department tracks hazard-related data to identify, monitor, and report trends. Identified trends are further analyzed and/or investigated by the System Safety Department and/or the appropriate department(s) to determine causal factors. The investigation may include interviews, testing and extensive analysis of related documentation. Identified hazards are tracked, trended and submitted to the affected department(s) for corrective action. The System Safety Department distributes this data to appropriate PRT management and affected departments, at all levels. In addition, this data is reviewed periodically by the OSSRC to assess effectiveness of the process and information provided.

4.10.3 Data Access

To ensure that the System Safety Department can properly fulfill its responsibility of continuously tracking, trending and communicating passenger and employee injuries, vehicle accident/incidents, and hazard-related data, other PRT departments provide the System Safety Department access to the data it is responsible for documenting and maintaining as indicated in the following table. Refer to section 3.4 for information on Hazard reporting.

Table 23 - Data Access

Required Data	Provider
Traffic and passenger accident/incident reports	Bus/Rail Operations
Traffic and passenger accident/incident reports	Rail and Facilities Bus/Rail Operations
Accident records, employee injury forms, and related accident data	Claims Department
Near Miss reports	Employees
Bus operator and maintenance training programs and records	Bus Operations

Required Data	Provider
Rail and Bus accident /incident investigation reports, complaints and hazards	Bus/Rail Operations Rail and Facilities Transit Police
Rail operator and maintenance training and re-training programs and records	Rail and Facilities Bus/Rail Operations
Medical Services information	Human Resources Division
Right-of-Way Allocation records	Rail and Facilities
Safety records of individual division employees relative to accidents and rule violations	Rail and Facilities Bus/Rail Operations
Records of inspections, maintenance work, accident-related activities and emergency responses	Rail and Facilities
Modifications to equipment and facilities	Technical Support and Capital Program
System-wide policies and procedures, operating orders and general notices	Chief Operating Officer
Complete and current personnel files	Human Resources Division
Derailment Committee findings and recommendations	Technical Support and Capital Programs
Contractor's safety-related programs and procedures	Technical Support and Capital Programs
List of hazardous materials and equipment	Finance Division

4.11 External Specialized Expertise

In the event that determining causal factors exceeds the capabilities of the internal PRT investigation team, external specialized expertise may be used to assist with the investigation. These external sources would be dependent on the needs of the investigation team and could include but not limited to local, State or Federal resources to complete the investigation. Incidents involving multiple serious injuries and/or fatalities may require notification and expertise from external agencies such as County Homicide, District Attorney and appropriate state and federal agencies. Investigations requiring specific engineering or other technical expertise may involve PRT's Technical Support and/or other external engineering contractors.

4.12 Corrective Actions

Under the PennDOT Rail Transit Safety Review Program (PRTSRP), the PRT is required to develop corrective action plans for various deficiencies and hazards identified through on-site safety and security review process, accident or hazard investigations, internal safety or security reviews, etc.

A number of events that prompt corrective action plans are described in the RTSRP's procedures for investigation of accidents, incidents and hazards, and internal safety and security reviews. Either the RTSRP or the PRT may identify need for additional corrective action plans, outside of those required in the RTSRP's procedure. If the RTSRP identifies a need for a corrective action plan outside of its published procedures, it will notify the PRT in writing.

Corrective action plans prepared for purposes of the RTSRP must be formulated in accordance with this procedure and as appropriate should address:

- Investigations and/or documentation of reported events, and internal or external audits verifying compliance with regulatory standards;
- The application of current agency safety policies;
- Quantifiable and/or qualifiable objectives;
- Appropriate analysis of data to include confidential employee feedback loops and actions to eliminate the causes of non-compliance and to prevent recurrence;
- Process for implementation/tracking of CAPs;
- Active management oversight and clear lines of authority when accepting risk mitigations.

All timeframes identified in this procedure refer to the PRT's development of a corrective action plan. The timeline for actual implementation of the plan will vary according to the area being corrected and is not prescribed in this procedure.

4.12.1 Causes for Initiation of Corrective Action Plan

- **RTSRP Safety and Security Audits:** Upon receipt of the final report for an RTSRP safety or security audit the PRT will have 30 days to develop a corrective action plan to correct identified Findings of Non-Compliance. Issues reported by the RTSRP will be entered into the CAP log and tracked to resolution
- **Event Investigations:** Regardless of which agency conducts the investigation process (PRT or RTSRP directly), the final report must contain identified causal factors, and findings and recommendations for addressing deficiencies or unsafe conditions identified during the process. Causal factors will be determined by conducting an investigation, and may include interviews, scene examination, data review, scene preservation, and other investigative techniques. If needed PRT may utilize an SME contractor to assist with the investigation. The resolution of these deficiencies will be the primary responsibility of PRT, with assistance provided by RTSRP, as may be required. Upon receipt of the final report, the PRT will have 30 days to develop a corrective action plan or methodology to correct identified deficiencies.

- **Hazards:** Regardless of which agency conducts the hazard investigation process (PRT or RTSRP directly), the hazard investigation may result in CAP's for addressing deficiencies. This includes complaints from personnel as the public pertinent to the hazard. The resolution of these deficiencies will be the primary responsibility of PRT, with assistance provided by RTSRP, as may be required. Upon identification of an unacceptable hazard, the PRT will have 30 days to develop a corrective action plan to correct identified deficiencies.
- **Internal Safety and Security Audits:** If the PRT finds areas of non-compliance during internal audits of its Public Transportation Agency Safety Plan or Security and Emergency Preparedness Plan, those areas of non-compliance must be remedied by a corrective action.
- **NTSB Recommendations and Guidance:** If the National Transportation Safety Board (NTSB) conducts an investigation at PRT, it may issue a formal report with recommendations to PRT. Should this occur, the PRT shall review the recommendations and determine their appropriateness. If the PRT determines that a recommendation is appropriate, it will develop a corresponding corrective action plan to address the recommendation. If the PRT determines that a particular recommendation is not appropriate, the RTSRP may require it to conduct a supplemental hazard analysis or investigation to support this conclusion. A written record of all analyses of NTSB recommendations shall be maintained.
- **FTA Recommendations and Guidance:** If the Federal Transit Administration (FTA) issues a bulletin that covers PRT, RTSRP may require PRT to develop a written record of all analysis of FTA recommendations and develop corresponding corrective action plans to address recommendations.
- **Major Capital Projects:** Preliminary Hazard Analyses, Threat and Vulnerability Assessments, and other studies that PRT must conduct of its major capital projects – such as a safety certification – may identify room for improvement. Such deficiencies must be addressed through development of a formal CAP within 30 days after completion of the study.
- **Data/Trend Analysis:** PRT must conduct analysis of operational and maintenance data as well as repeated occurrences of hazards and incidents to determine the existence of trends. Upon discovery of a trend, PRT must develop a CAP within 30 days.
- **Threat & vulnerability assessments and Drills and Exercises:** If the PRT determines areas of non-compliance or concern, it will develop a corresponding corrective action plan to address and remedy the situation.

- **APTA standards, Peer reviews, TSA (BASE reviews), TCRP reports:** Recommendations or potential non-compliance issues will be reviewed for applicability and if deemed necessary a corrective action plan will be developed.
- **Other:** In the course of performing or reviewing on-site safety and security audits, investigations, annual safety audits, or any other means by which RTSRP becomes aware of a hazard that requires immediate attention, RTSRP will notify the PRT in writing of the identified hazard and direct the PRT to prepare a corrective action plan. The timeframe for the corrective action plan will be specified in the written notification from RTSRP.

4.12.2 Immediate/Emergency Corrective Actions

In the event the PRT must initiate an immediate or emergency corrective action to ensure ongoing safety of its passengers or employees, it may begin implementation of said CAP prior to notifying and receiving approval from the RTSRP. Situations where this may occur include the discovery of an unacceptable risk or necessary changes to operations or maintenance as part of an investigation or as a result of an internal or external audit.

The PRT will notify the RTSRP within 24 hours of implementing the immediate/emergency CAP. The RTSRP will then review the submitted information and either approve or request more information within 7 calendar days.

4.12.3 Corrective Action Plan Dispute Resolution

If the PRT disagrees with an RTSRP Finding of Non-Compliance, RTSRP may instead authorize the PRT to perform a detailed hazard analysis. The hazard analysis is meant to ensure that the deficiency, if unmitigated, does not present an unnecessary safety or security risk to passengers, patrons and personnel, or to the public. The hazard analysis must follow all requirements outlined in the Program Procedures and Standards as well as the PRT's Hazard Management chapter of its PTASP.

RTSRP will review the hazard analysis and decide whether to approve it or require revisions. Revisions may be necessary if the analysis does not address the intent of the identified Finding or does not follow hazard analysis process requirements. If the hazard analysis shows that the deficiency presents an unacceptable level of risk when left unmitigated, RTSRP will require the PRT to propose a CAP.

4.12.4 Corrective Action Plan Required Components

The Corrective Action Plan will include the following information:

- Date Identified – Date the CAP was generated.

- Source – What generated this CAP (ex. FTA reporting requirement, Accident/Incident, Hazard, etc.)
- Finding of Non-Compliance – Description of the deficiency or needed improvement.
- Risk Rating – Rating based upon hazard analysis, if required.
- Corrective Action Plan – CAP must clearly address the precipitating event or hazard and outline proposed mitigations.
- Notes/Comments – RTA/RTSRP will enter progress and feedback on open CAP.
- Responsible Party – Individual/department responsible for CAP.
- CAP Issue Date – Date at which RTA submitted CAP to RTSRP.
- CAP Target Date – Proposed date at which the CAP will be completed.
- Transit Agency Status – Open, Awaiting Verification or Closed.

4.12.5 Corrective Action Plan Schedule and Format

PRT will submit and update corrective action plans on an ongoing basis, but within the requirements of the PRTSRP Standards and Procedures. This will be done via the VectorSolutions (formerly IndustrySafe) online CAP system. PRT along with the RTSRP will continue to hold quarterly update meetings to review and update progress on open CAP's.

4.12.6 RTSRP Corrective Action Plan Review and Approval

PRT must submit each CAP to the RTSRP for approval via the online VectorSolutions (formerly IndustrySafe) website. This applies to CAP's resulting from deficiencies identified both internally and externally. Upon each submission, the RTSRP will review each corrective action plan and evaluate it compared to the identified issue (accident cause, audit finding, hazard, etc.). RTSRP will notify the PRT in writing of its acceptance or rejection of the CAP. Depending on the type of corrective action plan and the issue it addresses, the RTSRP will ask the PRT for additional supporting information, possibly including documentation, records, field demonstration of a revised process or procedure, or a follow-up audit or review. In most cases, at a minimum, the PRT should anticipate collecting and submitting supporting documentation to substantiate the CAP activity and submit it to the RTSRP when verification of implementation is requested for CAP closure.

The RTSRP will approve corrective action plans at three intervals:

1. **On initial submittal:** The RTSRP will review the corrective action plan and looking at its appropriateness to the issue at hand, its timeliness, its practicality, and similar factors, will approve the CAP if appropriate.
2. **When updated or submitted as part of overall CAP log:** The RTSRP will review the corrective action plan, any changes to its scope, timing, or approach, and its progress to date, and will approve the CAP if appropriate. During this

phase, the RTSRP may ask for interim verification evidence or an interim demonstration of progress in the field.

3. **When submitted for verification and requesting a closed status:** The RTSRP requests transit agencies alert the RTSRP of any pertinent updates and requests for closure.

4.12.7 Rejection or Modification of Corrective Action Plans

If RTSRP rejects a proposed CAP, the PRT will have 15 calendar days to address noted deficiencies in the plan and submit a revised plan to RTSRP. At its discretion, RTSRP may arrange for a meeting with the PRT to discuss the noted deficiencies. One reason for CAP rejection may be an extended timeframe for implementation; PRT should identify interim measures to address the deficiency until permanent measures can be completed. Similarly, PRT must also ensure that budget constraints do not prevent CAPs from effectively mitigating deficiencies. Such constraints may necessitate the PRT to classify the expensive CAP a long-term effort, while less expensive remedial actions occur in the interim. Alternately, a mix of several inexpensive mitigations may be needed in place of a CAP calling for prohibitively costly improvements.

4.12.8 RTSRP Verification and Closure of Corrective Action Plans

For each CAP, the PRT proposes to close, the RTSRP will review the Corrective Action Plan's completeness, and will conduct a final verification of documentation, records, or process implementation, as appropriate to the particular issue. These CAPs will be given the "AWA" (Awaiting Approval) status in the CAP's log. The RTSRP may request additional information or action from the PRT. RTSRP will conduct this verification through one or more of the following means:

- Field observation
- Photographs provided by the transit agency
- Receipt of new or revised document
- Work order or similar document showing full completion
- Audit of transit agency records

IF RTSRP disagrees with the PRT assessment that a CAP is completed, RTSRP may require the PRT to either perform a more detailed hazard analysis or transmit a letter to RTSRP documenting the PRT assessment that the hazard or issue is sufficiently mitigated. If the PRT and RTSRP cannot agree on the satisfactory completion of a CAP, the RTSRP, PRT and senior PennDOT personnel will work together with PRT executives to resolve the issue.

Only the RTSRP has the authority to close a CAP, upon receipt or confirmation of appropriate verification from PRT.

4.13 Ensuring CAP Effectiveness

Once a corrective action plan has been submitted, approved, actions taken, verified and finally closed out by RTSRP, the PRT will then implement a process to ensure the corrective measure is addressing the original deficiency and not unintentionally introducing a hazard into the system. This process will involve the Safety Event Review Team (SERT) chaired by the Deputy Chief Safety Officer and includes members from System Safety, Transit Police, Claims, Bus Operations, Road Operations and ATU Local 85. This committee meets on a regular basis and reviews accident data as well as trends. Meeting minutes are taken and distributed following each meeting. The committee will review and ensure any accidents or incidents reported are not related to the original deficiency. This will include reviewing operator reports, police reports and when necessary, field visits to locations in question. The committee will decide as a whole after a period of time, when they feel the corrective action has been successfully implemented and does not introduce and other hazards. This length of review by the committee for each CAP will be based upon each individual situation.

4.14 Accident and Incident Reporting

4.14.1 Internal

As the first responder from PRT, Transit Police and Security Services/Road Operations personnel must address the following:

- Coordinate emergency personnel services and call for additional emergency personnel, if necessary.
- Secure and preserve accident scene.
- Determine severity of the accident and report information to the Rail Traffic Operations (RTO) (Rail) or Bus Traffic Operations (Bus) who in turn will initiate the proper notification via PRT's alert system.

Table 24 - Accident Classification

For the purpose of this section, the following classifications are for record keeping and statistical purposes only.

Type/Class	Requirement
Non-Serious (Class 1)	An accident not requiring a state report (police), no injuries, no towed vehicles and/or does not meet PennDOT or NTSB notification criteria
State (NTD) Reportable (Class II)	An injury requiring transport to hospital or vehicle tow

Type/Class	Requirement
Serious Accident (Class III)	Any accident involving serious (life threatening) injury, multiple injuries, fatality or property damage of \$25,000 or greater

Transit Police and Security Services officer will also notify police dispatch of the accident severity. If a serious accident, the police dispatcher will page an on-call accident investigator to respond. If already on duty, he or she will be dispatched to the accident scene and will assume control of the investigation upon arrival.

4.14.2 External

The PRT's Chief Safety Officer or his/her designee is required to notify the FTA, PennDOT, NTSB and/or the PUC Representative after the occurrence of accidents/incidents, and provide the following information:

- The name and transit system of the caller
- Type of accident (e.g., which accident criteria)
- Time and date of the accident
- The location of the accident
- Transit vehicle identifying information, including route, direction, vehicle number, block number, etc.
- Information about any other vehicles involved
- Number of injuries (persons requiring immediate medical attention away from the scene)
- Number of fatalities

4.15 Coordination with Oversight Agency

4.15.1 RTSRP Investigations Responsibilities

The RTSRP investigation responsibilities and PRT coordination requirements are detailed in the RTSRP Procedures and Standards and are incorporated by reference to the PRT PTASP.

4.15.2 RTSRP Requests System Safety Produce a Formal Report

For certain types of incidents, the RTSRP will request that the System Safety Department to issue a formal written report. These accidents will generally include:

- Accidents with a significant number of injuries
- Accident with fatalities

- Accidents which, upon preliminary report, involve a seemingly significant unmitigated, unidentified, or unquantified hazard
- Accidents involving vehicle, infrastructure, rules, or systems anomalies which have caused or could cause significant loss
- Accidents where a more independent investigation seems necessary

As part of this investigation methodology, the RTSRP may explicitly request a formal System Safety Department report containing all factual, investigative, and corrective action information. Alternately, the RTSRP may request, or the PRT may suggest that a system safety department memorandum or other document be used to address specific issues or information deficiencies in operating, maintenance, or engineering reports.

When the RTSRP requests that System Safety Department produce a formal accident investigation report, the following schedule will apply:

- **Preliminary Verbal Report:** Basic information, as defined by procedure, about the reportable accident must be transmitted verbally to the RTSRP during the notification process.
- **Preliminary Written Report:** PRT must fax, e-mail, or hand deliver preliminary written information, including any incident investigation summary information, preliminary reports from field personnel, and other available information within (3) business days, unless the PRT files a written request for extension.
- **Investigation Status Report:** The RTSRP may, at its discretion, request from the PRT a report indicating the status of the investigation, including any significant new reports or report components, and any preliminary investigation findings within ten (10) days of accident.
- **Final Accident Report:** At the conclusion of its investigation, and within 60 days of the accident, the PRT System Safety Department must transmit to RTSRP a final accident report. If the PRT requires additional time to complete its investigative activities, then it shall request additional time from RTSRP. RTSRP will work with the PRT to close open accidents with consideration of needed investigative processes, including (but not limited to) transportation investigations, derailment reports, police investigations, medical examiner reports and other required materials to close an accident investigation.

Upon the completion of the accident investigation process, the System Safety Department will submit a draft final accident investigation report to RTSRP. RTSRP will review this report within 10 days and either accept it or require specific additional information or request changes. RTSRP will notify the PRT in writing of its approval of the report or of required revisions. If revisions are required, the time frame for revising the report will be determined jointly by RTSRP and the PRT, on a case-by-

case basis. In reviewing the accident investigation report RTSRP will ensure that the report has:

1. Description of the accident including a clear sequence of events before, during, and after the accident
2. Description of investigation process and methodology
3. Description of the post-accident testing and research conducted
4. Conclusions (including findings and identified causal and contributing factors)
5. Corrective action plan (outlined in "Corrective Action Plans" section)
6. Supporting analysis to defend recommendations in report
7. Recommendations

If the RTSRP approves the report, it will ask the System Safety Department to finalize it and will make the final version the RTSRP's own accident investigation report. In the very rare case that the PRT and the RTSRP disagree about the changes and cannot come to a resolution, the RTSRP will utilize the PRT's original report with RTSRP addenda or additional investigation as needed to fulfill the accident investigation.

Accident reports may be delivered to RTSRP in a format agreed to by the Program Manager (electronic or hard copy).

4.15.3 Other Oversight Agency Conducts Investigation

Depending on the accident, another oversight agency such as the NTSB may conduct an accident investigation utilizing its own procedures and personnel. The RTSRP will provide to the investigation team any information necessary to conduct the investigation in an effective and efficient fashion. If the incident in question is an RTSRP-reportable accident, the RTSRP must review the other oversight agency's final report and formally adopt it as its own or prepare its own report for the accident (using its own personnel or authorizing the PRT to conduct the investigation).

If the NTSB investigates an accident at the PRT, the RTSRP will request that its representative(s) be permitted to participate in the investigation process.

4.15.4 Joint Investigations

In certain cases, the PRT and the RTSRP may find it advantageous to conduct a joint accident investigation. The PRT and the RTSRP may use the PRT's procedures, RTSRP's procedures, or a combination of the two procedures to investigate the accident. The procedures to be used must be established prior to the investigation and agreed upon by both the PRT and the RTSRP. If the PRT or the RTSRP determine that a joint investigation may be beneficial, the parties will contact each other either formally or informally to initiate the process. A written letter will be used to formalize the scope and approach for the investigation.

4.15.5 Safety Risk/Hazard, Incident, and Other Investigations

In certain cases, the RTSRP may determine that a formal investigation is necessary for events occurring at the PRT, even though such events may not meet the RTSRP's accident reporting criteria. Most commonly these events will include hazards, significant operational incidents, FTA Safety advisories, whistleblowing complaints and other events that could lead or could have led to significant reportable accidents.

If the RTSRP determines that an investigation into such an occurrence is necessary, it will notify the PRT as soon as possible. For incidents having a discrete time of occurrence, this notification will occur within three (3) days. For hazards, the RTSRP will attempt to match this timeframe, however some hazards may only become clear after a level of analysis.

For investigation of hazards and incidents, the RTSRP will typically request that the PRT perform an investigation on its behalf. Such investigations will be conducted in accordance with the processes above. To the maximum extent possible, the RTSRP will identify to the PRT whether it requires provision of existing incident documentation or new and independent System Safety Department investigation. The RTSRP may modify deadlines as listed in the procedure due to the nature of a particular hazard or incident.

In the case of hazard investigations, the RTSRP will often request that the PRT's System Safety Department conduct an investigation on the RTSRP's behalf, independently of investigatory activities conducted by other PRT departments. The RTSRP will typically request that the PRT perform a hazard investigation and analysis using its hazard management process as found in its RTSRP-approved PTASP.

4.15.6 RTSRP Conducts Investigation

The RTSRP may elect to conduct an independent accident investigation, or supplemental investigation activities, separate from those of PRT. Such independent RTSRP investigations may be necessary if there is a problem with investigation independence or if the PRT declines a request to conduct an investigation on the RTSRP's behalf. The RTSRP will notify the PRT of any decision to conduct its own formal accident investigation as soon as possible after the decision has been made and will at a minimum issue a written notification of that decision.

At a minimum, RTSRP will conduct an investigation when the integrity of a PRT's own investigation could be called into question due to a real or perceived conflict of interest. In such cases, RTSRP will lead a thorough, unbiased inquiry, with cooperation and assistance from PRT personnel.

The RTSRP may choose to conduct an investigation of the accident utilizing its own personnel or an authorized contractor. The RTSRP will identify a team of investigation personnel and expects that the PRT will provide to the investigation team the resources and information necessary to conduct the investigation in an effective and efficient manner. Such resources may include: operations, maintenance, and inspection records; photographs, interview material, and other evidence documentation; access to accident sites or physical evidence such as railcars or infrastructure that was involved in the accident; and any other information which is pertinent to the investigation.

All RTSRP–authorized accident investigation personnel are granted authority under the Pennsylvania State Safety Oversight program to conduct an investigation and evaluate records, materials, data, analysis, equipment, and other information which is pertinent to the investigation. It is expected that the PRT will provide to the RTSRP investigation team the resources and information necessary to conduct the investigation in an effective and efficient fashion. RTSRP will provide notes or other evidence developed by the RTSRP investigation team to appropriate PRT personnel.

In some cases, RTSRP will not conduct its own investigation but may decide to designate itself as a party to the PRT’s full investigation. Under this arrangement, RTSRP, will not produce its own investigation report but may respond to the accident scene and will participate in PRT’s investigation activities and meetings.

4.15.7 RTSRP Accident Investigation Procedures

In the event that RTSRP elects to conduct an independent accident investigation, it will do so using APTA’s Operating Practices standard RT-S-OP-002-02: Standard for Rail Transit Accident/Incident Investigation as a model. Generally, this process will occur as follows:

1. Upon notification of an accident and when RTSRP determines that it will conduct its own investigation, the Program manager or designee will notify the PRT verbally and in writing and will request any immediate assistance that is needed to facilitate the investigation.
2. If RTSRP plans to conduct any independent on-scene investigation, the program manager may request that the PRT hold the scene until RTSRP personnel arrive, complete their investigation, and clear the scene. RTSRP personnel will attempt to be as efficient as possible and will try to avoid interference with the PRT’s own investigation, where applicable. If first-hand, independent investigation is not necessary, RTSRP may simply oversee the PRT’s field investigation process.
3. RTSRP will communicate with the PRT safety personnel to arrange any document reviews, equipment or site inspections, interviews, or other reviews that may be necessary after the initial on-scene investigation. As with the on-

scene investigation, RTSRP may oversee and adopt follow-up investigation components conducted by PRT personnel.

4. RTSRP will, as appropriate, employ any special resources available to it, including transit contractor expertise, etc. If these resources are utilized, their results will also be made available to the PRT for use in its accident investigation.
5. RTSRP will assemble collected evidence, data, and information, and will draft an appropriate accident investigation report, based on the following format:
 - Executive Summary
 - Sequence of Events
 - Prior to the accident/incident
 - The accident/incident
 - Subsequent to the accident/incident
 - Findings/analysis
 - Conclusions
 - Probable cause
 - Contributory causes
 - Recommendations
6. RTSRP will issue its draft accident investigation report to the PRT within (60) days and will allow ten (10) days for comments. RTSRP will attempt to resolve any conflicts or disputes over draft accident investigation report in a manner that ensures the best possible report.
7. After the comment period and any associated revisions, RTSRP will provide a copy of the final report to the PRT and will require the PRT to incorporate accident report recommendations into its corrective action plan process, in accordance with RTSRP Standards. Any unaddressed accident report recommendations will be handled via the standard RTSRP review Findings process.

4.16 Drug and Alcohol Program

PRT requires a drug-free and alcohol-free workplace. The PRT provides assistance to employees with personal or related problems that could affect job performance. Program policies/procedures are contained in the following documents:

- Employee Assistance Program (administered by the Employee Assistance Program Manager)
- Drug and Alcohol Abuse Program (administered by the Program Manager of Drug and Alcohol)

Policies regarding drug and alcohol abuse are regulated by the following:

- Pittsburgh Regional Transit's Drug and Alcohol Abuse Program
- Drug-Free Workplace Act of 1988
- FTA's Regulations for Testing and Safety-Sensitive Positions

4.17 Hours of Service (HOS)

PRT established rules and procedures for hours of service for Bus Operators in compliance with the Commonwealth of Pennsylvania Department of Transportation Order Number 017 originally issued by the Secretary of Transportation on July 23, 2013 and subsequently amended and extended.

The order establishes requirements for maximum hours on duty, daily rest periods, fatigue training and recordkeeping. On or before October 30, 2013, Pittsburgh Regional Transit and other Pennsylvania public transit agencies were required to certify to the Department of Public Transportation that written procedures implementing reporting and training requirements were in place.

The Hours-of-Service procedure is available upon request and incorporated by reference to this PTASP.

On or before January 30, 2014, Pittsburgh Regional Transit and other Pennsylvania public agencies certified to the Department of Public Transportation that hours of service requirements were implemented as of January 23, 2014, and amended on July 30, 2019, and continued on August 4, 2022.

As regulations and procedures are finalized and approved, changes will be documented in future Public Transportation Agency Safety Plan revisions.

On November 1, 2021, PRT formally enacted an HOS standard for all Rail Operators. The standard is the same as the current Bus Operator requirements as spelled out in the Commonwealth of Pennsylvania Department of Transportation Order Number 017, although not required by the Commonwealth.

As of this revision, there is no final rule from the Pennsylvania Department of Transportation concerning Hours of Service.

4.18 Fitness for Duty

PRT issued a Fitness for Duty policy effective October 1, 2014, revised 1/1/2018 and June 2019 and incorporated by reference. This policy is available for review upon request.

4.19 Procurement Procedures

The purchasing process formally begins with the preparation of a request and its submission to the Purchasing and Materials Management Department. However, planning for contracts and procurement actions begins far in advance of this time. Advance procurement planning includes safety as a significant factor by addressing system safety as well as technical, business, management, and other considerations that will control acquisition actions from inception through completion. Thorough inspection and system testing is performed before equipment or facilities are accepted.

The Purchasing and Materials Management Department works in conjunction with the System Safety Department when purchasing personal protective equipment for employees, controlling chemicals and other hazards in the workplace, mandating safety requirements in specific contracts, and requiring compliance from specific vendors with PRT's safety requirements.

4.20 Hazardous Materials Program

This section describes the PRT's Hazardous Materials Program, as a sub element of the SMS Safety Assurance component. The hazardous materials protocols ensure that measures, controls, and assurances are in place to so that safety principles, requirements and representatives are included in PRT's hazardous materials and waste disposal procurement process.

It is the responsibility of the PRT to minimize and control the generation of hazardous waste and pollutants to protect the environment. All PRT activities must comply with applicable federal, state, and local environmental protection laws. Procedures have been established in order to control hazards associated with procurement, storage, transfer, use, and disposal of hazardous substances. Methods used in this process include product and substance evaluations, procurement procedures, monitoring, testing, inspections, and training. These procedures also address record keeping and reporting requirements. Examples of PRT's handling of hazardous materials and waste include a database of Material Safety Data Sheets / Safety Data Sheets and procedures regarding chemical labeling, chemical disposal, and employee notification (i.e., right-to-know). Annual Right-to-Know and Hazardous Waste Awareness Training is conducted by the System Safety.

The Pittsburgh Regional Transit's Employee Right-to-Know and Hazardous Waste Awareness Manual is incorporated by reference and available for review.

5.0 SAFETY PROMOTION

5.1 Competence, Training, and Safety Communication Overview

Safety promotion includes a training and certification program for employees and contractors and incorporates applicable local, state, and federal requirements.

Key safety staff are required by 49 CFR Part 672 to attend required courses to complete Individual Training Programs known as the Public Transportation Safety Certification Training Program. PRT key safety staff includes the entire System Safety Department. The PRT Chief Safety Officer has completed the required courses and has received certification under this program from the FTA. Other PRT employees, including all Safety Officers, are working towards obtaining this certification and as well by attending safety courses offered by the USDOT Transportation Safety Institute (TSI). The CSO, DCSO, as well as all Safety Officers are or will be PTSCTP trained and certified, as required by 49CFR Part 672.

5.2 Training Competence Program

PRT uses safety training programs, integrated into operations and maintenance training, as a means of informing employees about hazards and safety risks associated with their jobs and methods for controlling these hazards, safety risks, and potential consequences. The programs promote safety motivating employees to work safely. There are three types of safety training: 1) initial, 2) periodic, and 3) retraining. Training mechanisms include classroom, written and video communications, field exercises, and drills.

There are formal training programs for bus and rail operators and employees involved in maintenance activities. These include training classes, training manuals, and lesson plans. Testing is conducted as necessary to ensure training effectiveness and all safety training is documented. Tests are given to all new rail/bus operators to ensure knowledge. Retraining of operators can occur as a result of accident investigations, long-term absences, and observations. General refresher training for all operators is scheduled on a three-year cycle. Lesson plans that include policy, rules, and procedures are utilized in this effort. The frequency and amount of training conducted by the various departments depends upon regulatory requirements and the level of hazard associated with the operation. The Chief Safety Officer, Director of Training, the OSSRC, and the Safety Event Review Team (SERT) work together to ensure that safety elements are included in the curricula and that safety information is disseminated to affected employees. More specifically, this effort includes:

- Identifying requirements for all PRT training as it impacts safety. This encompasses initial and refresher training related to procedures and equipment including manufacturers training and retraining requirements identified as a result of accident investigations.

- Reviewing all training programs for safety adequacy.
- Assessing the effectiveness of 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.
- Providing specific training with specialized curricula to rail operators, mechanics, and emergency response personnel with the introduction of new vehicle technologies.

5.2.1 Safety-Related Work Training

To ensure that all operations and maintenance personnel performing safety-related work are properly trained, qualified, and certified, the PRT has established the following categorized safety-related training programs. All training programs are incorporated by reference and many programs include retraining requirements as well. The following sections are an overview of several programs.

Table 25 - Safety Related Work Training Categories

Safety-Related Work Training Categories
Bus System Operations Training
Bus Equipment Maintenance Training
Roadway Worker Training (Busways and Light Rail System)
Rail System Operations Training
Shifter/Repairman Training
Rail Technician Training (LRV)
Road Operations Supervisor Training
Maintenance Inspection Training
Electrical, Signal, Power, and Substation Training
Track service, Heavy Equipment Maintainer-Operator
System Pick Retraining
Post-Accident Retraining
Operator Extended Absence Training
Movement Director Training
Standard Operating Procedures (SOP) and Rulebook Training
System Safety - Employee and Contractor Safety Training

Each of the categories above will also receive de-escalation training for personnel directly responsible for safety, which is interpreted by PRT as employees that may interact with persons who are distraught or violent. In the event that a contractor or contractor employee is required to work on PRT rail system under operating conditions, training requirements will be spelled out in the contract. PRT rules and procedures will be applied without exception to all members of the contractor's work

force affected. Contractors must be instructed on procedures, know the procedures and follow the procedures.

5.2.2 Descriptions of Training Programs

5.2.2.1 Bus System Training

All operators must qualify as a Transit Coach Operator prior to becoming a rail operator. A training program for new hires requires the completion of a ten-week course and includes the Commercial Drivers' License (CDL) Certification.

Table 26 - Transit Coach Operator and CDL Training Topics

Training Topics
Orientation
Bus/Coach Familiarization
PRT Cards and Schedules
Bus Operation and Revenue Service Routes
Fares and Farebox
Passenger Relations
Accident Reports
Service Stops
Emergency Training including Fire Extinguisher and ICS
Americans with Disabilities Act (ADA)
Route Qualification
Performance Code
BTO/RTO Orientation
Two-way Radio Operation
Security Awareness
Fatigue Awareness
Hours of Service Requirements
De-escalation Training

Bus Equipment Maintenance Training

Activities include examining interrelationships of equipment, maintenance practices, and the users of the equipment. Training is used to instruct Bus Equipment Maintenance personnel in hazard control methods as well as de-escalation in cases where they may interact with employees or others who are distraught or violent. Failure analysis is performed, and failure trends are identified and reported.

5.2.2.2 Rail System Training

The rail operator training program consists of the following elements:

Table 27 - Rail Operator Training Program

Program Element	Requirement
New Student Training	Per Current Rail Operator Training Program
Operator Absence (30 days)	Test trip (in non-revenue service) with instructor
Operator Extended Absence (more than 30 days)	May receive 1-3 days retraining (at discretion of the instructor)
System Pick Retraining – (operator was rail operator, transferred to bus division and is now returning to the rails)	1 day (if one year or less) 2 days (if one to two years) 3 days (if two to three years) 4 days (if three to four years) 5 days (if more than four years) Additional days can be added at the discretion of the instruction
Post-Accident Retraining	1 day minimum
Retraining for a change in system or equipment	Per Current Rail Operator Training Program

Other employees in Rail Operations and Maintenance who need to operate LRV's as part of their job receive training as described below:

Program Element	Requirement
Service Person Training	4 days (yard only)
Rail Tech Training	4 days with previous service person training, 8 days with no previous training.
Road Operations Supervisor	10 days with no previous rail training, 5 days with previous rail training.
Retraining for a change in system or equipment	TBD – Training activities & duration will vary based on complexity of new systems & employee classification.

Table 28 - Other Rail System Training Courses and Requirements

Course	Requirement(s)
Vehicle Maintenance Specialist	Required to attend an intensive training program conducted by a local vocational school or Rail/Bus Maintenance Training Department. Training documentation is maintained, and training activities are reviewed and monitored by management and coordinators.
Way Supervisor	Must successfully complete all 12 modules of the Track Maintenance Training Program within the first 12 months of acquiring the position.
Heavy Equipment Maintainer-Operator	Required to attend extensive training on various Hi-Rail equipment, heavy equipment, and power tools conducted by in-house instructors and third-party manufacturers. Must also obtain a class A CDL license, EPA certifications, and welding proficiencies.
Facilities Wirepersons	Facilities wirepersons receive equipment and job training from PRT MAP instructors.
Facilities Maintainers	Facilities maintainers receive training from Heavy Equipment Instructors and qualified Maintainers.
Signal, Power, and Substation groups	Signal & Substation groups must attend and pass 18 to 24-month apprenticeship training conducted by PRT MAP Training Specialists. Power/overhead employees are trained in an internal Power Department program.
Pre-qualification Tests	ALL MAP job positions require a pre-qualification job aptitude test before the employee is awarded a job. Only then does formal training begin.
Retraining for a change in system or equipment	TBD – Training activities & duration will vary based on complexity of new systems & employee classification.
Maintenance Inspection Training Program (MITP) for Light Rail Vehicles	The MITP Program includes instruction to ensure that the individual performing the inspection has been properly trained.

Course	Requirement(s)
Rail Maintenance Shifter/Rail Technicians Special Training – for Operating LRV's in yard, and/or on main line	Special training for experienced maintenance personnel who are required to road test cars on the main line in a designated area.
New Road Operations Supervisors	Required to attend an intensive training program designed specifically for new Road Ops Supervisors with no prior rail operating experience before assuming responsibilities for handling incidents and emergencies in field.
Movement Director Training Program	Complete specialized training before assuming active responsibility for directing rail operations under normal and emergency conditions at the RTO Control Center. Refer to RTO Student Training Manual for more details.
Roadway Worker Protection Training Program	All employees and contractors who work on or about the rail system must complete this training from System Safety before accessing the Right of Way.

5.2.3 PRT Roadway Worker Protection Program

PRT employees and contractors working within or adjacent to PRT Right of Way, both bus and rail, must be protected from the hazards associated with both the light rail transit and busway systems. Employees and contractors will be monitored to ensure compliance with PRT's established rules and procedures for track and busway safety. *The latest approved Roadway Worker Protection Program Manual is incorporated by reference.*

The PRT Project Manager has the authority to issue stop work orders to any contractor or subcontractor who does not take or refuses to take prompt, corrective action when given notice of noncompliance with any of the applicable safety requirements. If imminent danger exists, the PRT may issue a stop work order.

5.2.4 Training Records

All training, including contractor training, system wide, is logged and maintained in PeopleSoft and other training data base systems. Divisions and Instruction may also use individual employee files maintained at their assigned division. This is the responsibility of the Operations/Maintenance Training instructors and Division Management. Training records will be maintained for the tenure of each employee while in the employ of PRT.

5.2.5 Compliance with Training and Certification Program

Proficiency in any of the above courses is determined through testing. Tests are given specifically to the type of training. Not all the above courses require all tests to be completed. Specifically, for students going through the new rail operator training course, please refer to the most recent Rail Operator Student Training Manual for a list of required tests and the scores needed to pass each exam.

5.3 Employee and Contractor Safety Program

5.3.1 Occupational Safety and Health

This function entails developing and implementing employee illness and injury prevention measures which comply with applicable federal, state, and local regulatory requirements. The Chief Safety Officer is responsible for developing and documenting this program, facilitating implementation by other departments, and monitoring compliance. Issues addressed include:

- Respiratory protection, hearing conservation, and personal protective equipment requirements
- Methods for identifying and evaluating workplace hazards
- Procedures for investigating occupational injuries and illnesses and correcting unsafe or unhealthy conditions in a timely manner;
- Occupational health and safety training for employees;
- Communication methods such as safety meetings, posted notices, suggesting programs, and labor/management safety and health committees;
- Verification of compliance with safety and health practices including recognition and discipline; and
- Documentation of compliance with program training and inspection requirements.

5.3.1.1 Safety Policy and Guidelines Manuals

Table 29 - Safety Policy and Guidelines Manuals

<u>Topics</u>
General Safety Rules
Housekeeping
Lifting / Lowering
Office Safety
Ladder Safety
Scaffolding
Machine Guarding

<u>Topics</u>
Slings
Fork Truck Operations
Fire Safety
Hot Work Permit Procedure
Red Tag Permit System
Handling and Storage of Compressed Gas
Personal Protective Equipment (PPE)
Eye Protection
Prescription Safety Eyeglass Program
Fall Protection
Lockout / Tagout
Basic Electrical Safety
Confined Space Entry Program
Right-to-Know – PA Title 34 Part XIII
Safety Committee
Tagging of Unsafe Equipment (Warning Tag)
Hazardous Material Transport Program
Toolbox Talk Procedures/Guidelines
Chemical Products Control Program
Trenching and Shoring

5.3.1.2 Safety Program Requirements

All affected departments will work with the Purchasing and Materials Management staff to ensure that, as appropriate, contractors and suppliers meet PRT's safety requirements, in the contracts, terms and conditions prior to commencing work. Department personnel in charge of each contract are required to monitor the safety performance of the contractor's/supplier's staff (e.g., wearing appropriate safety equipment, adhering to facility speed limits) and inform the Project Manager whenever deviations from established procedures occur or are needed. The Project Manager will coordinate the contractor's/supplier's safety activity with the Chief Safety Officer and the Purchasing and Materials Management Department. A safety officer participates on all new construction/modification committees formed and conducts joint inspections and safety meetings with contractors.

All PRT employees required to work within or adjacent to active PRT rail system right-of-way (ROW) are required to follow PRT rules and procedures.

All PRT construction packages must include specific PRT right-of-way (ROW) safety training requirements for contractors working within or adjacent to active PRT rail

system ROW. The contractors have primary responsibility for developing and implementing their safety programs. The PRT reviews the contractor's programs.

5.3.2 Compliance with Safety Program

Methods of communicating safety information to PRT employees include posting and/or distribution of bulletins, Division Information Messaging Monitors (DIMM), department notices, and memoranda. Such information is posted at a central location in each department easily accessible to employees. Other communication methods include posters, signs, brochures, training materials, rule books, and operating procedures.

PRT's comprehensive employee safety program includes the following elements:

- Semi-Annual Facility safety inspections with written reports and follow-up responses;
- Periodic employee AED Awareness training;
- Monthly safety committee meetings;
- Retraining/Special request employee safety training programs;
- Local fire department tours, and fire life/safety training;
- Safety posters;
- Annual worker right-to-know programs;
- Periodic insurance carrier/broker inspections;
- New hire Safety Orientation and training programs.

5.3.3 Employee Safety Reporting

At PRT, our objective is to cultivate and foster a safety culture in which employees and customers are comfortable and encouraged to bring safety concerns to the attention of management. With this Public Transit Agency Safety Plan and working toward the goal of a robust Safety Management System approach, PRT continues its long tradition of encouraging employee safety reporting.

Methods used in the past have included encouraging employees to report to Supervisors, Management, Division Safety Committee Members, Board Persons, ATU Local 85 Leadership and directly to the System Safety Department. The encouragement to use these methods continues and we have also added email and on-network reporting systems to allow additional methods of reporting near misses, hazards and other minor occurrences. Contractors are urged to report hazards and near misses to their Supervisors, Superintendents, and to PRT Management as well as any Consultant Resident Construction Managers. Those reports should be forwarded to the System Safety Department (CSO and DCSO) for reporting and tracking purposes.

Safety events that include injuries or property damage must be reported as accidents using the prescribed methods already in place. Safe transit operations are PRT's most important commitment to our employees, customers, and the public that we serve. To ensure this commitment, it is important that we have reporting of all incidents and occurrences that compromise the real and potential safety of our operations or other departments or contractors. There is a distinct need to learn from accidents and incidents through safety investigation so as to take appropriate action to prevent the repetition of such events.

PRT System Safety, with the assistance of other management will then review, investigate, and provide advice and assistance to Operations and/or Maintenance in resolving credible reported items. Employees or others reporting credible items will be contacted if more information is needed if contact information has been provided by the person. It is important that apparently minor occurrences are investigated in order to prevent catalysts for major accidents. Safety analysis and investigation is a necessary and effective means of improving safety, by learning the appropriate lessons from safety occurrences and adopting preventative actions. It is therefore important that an environment exists where occurrences are reported, the necessary processes are in place for investigation and for the development of preventative actions, to prevent future reoccurrence and possibly harm to others. Once the investigation is complete, PRT will again notify the individual that reported the occurrence of the investigation results and any correction measures put into place if the person had provided contact information.

The email safety reporting allows any employee or contractor to utilize either of two email addresses to notify the System Safety Department of hazards or safety related issues. The addresses are: 1) **safetyreport@rideprt.org** 2) **hazardreport@rideprt.org**. These email addresses forward the information provided directly to the Chief and Deputy Chief Safety Officers. Any unacceptable hazardous condition(s) must be mitigated, and the Chief and Deputy Chief Safety Officers notified immediately.

Employees may also utilize the Safety Reporting Hotline to report near misses, hazards or safety related improvement ideas. The phone number is (412) 237-SAFE (7233). These messages are sent directly to the CSO and DCSO.

The on-network safety reporting enables employees to report hazards, safety-related issues, concerns, and incidents through a process in which they can provide recommended solutions and ideas for safety mitigation or improvement. The process begins when an employee files a report to raise a safety issue through the on-network reporting system. This can be filed **anonymously**, or with contact information provided by the employee. The safety reporting program also includes non-punitive measures for employees to further encourage reports of hazards and incidents. The purpose for this is as follows:

5.3.3.1 Non-Punitive Reporting – Purpose

- Reduce resistance to the SMS program
- Builds confidence in the SMS processes
- Help engender trust between front-line employees and managers
- Explain which actions are not immune from disciplinary actions
- Offer a clear understanding of what to expect when employees submit hazard reports.

5.3.3.2 Non-Punitive Reporting Statement

No person will be penalized or retaliated against for bringing safety issues to the attention of management in a timely manner.

This policy does not include protections against occurrences of:

- Criminal activity,
- Substance abuse,
- Reckless noncompliance,
- Gross negligence,
- Willful actions,
- Sabotage, etc., and
- Falsely claiming or reporting an alleged safety issue post-accident or incident in an effort to avoid discipline for the subject accident or incident.

In addition, no protections are included for reporting events of which PRT would already have had knowledge through other means or methods that are a part of transit operations normal procedures, including data transmitting, recording, and monitoring equipment.

We ask that each employee communicate any information that may affect the integrity of light rail and bus transit safety. Employees are assured that this communication will not result in reprisal, thus allowing a timely, uninhibited flow of information to occur.

All employees are urged to use this program to aid PRT's safety culture in providing our customers and employees with the highest level of transit safety and service.

5.3.4 Public and Customer Safety Reporting

The public and customers using the system are encouraged to transmit safety concerns and hazards to PRT by contacting the Customer Service Department. Customer Service is typically contacted by telephone using the broadly published contact number. Customer Service forwards safety related concerns that they receive to the respective Operations Divisions, with a copy to System Safety. The Operations

Divisions corrects any safety issue that is within their scope of ability and informs System Safety of their action and resolution. System Safety should be contacted if additional assistance is needed. Further, PRT's Communications Department also sometimes receives safety related issues from the public and riders through various social media sites that PRT operates. Those concerns are relayed to System Safety by the Communications Department.

5.4 Safety Communication

5.4.1 Safety Communication Methodology

PRT safety communication is accomplished by various means including digitally via training, Division Information Messaging Monitors (DIMM), Crossroads PRT internal network, TransPort Employee Communication Newsletter, email, bulletins, employee safety reporting, directives, safety committee meetings, posters, and meetings throughout the organization.

5.4.2 Safety Communication Social Media

PRT is currently utilizing social media including Twitter and Facebook. The PRT is also reviewing other options for safety communications using technology such as creating dashboard defined widgets to keep staff informed of safety issues, incident trending, safety events and related informed to stay up to date on activities positive and otherwise throughout the organization.

5.5 Infectious Disease Prevention and Control*

PRT implements strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions, and be consistent with following local, County, State Health Authority, and the Centers for Disease Control (CDC) and Prevention guidelines to minimize exposure to infectious diseases. PRT has also developed internal plans such as a Pandemic Plan, Bloodborne Pathogen program and Infectious Disease training program which is given to all new employees. Additional information can be found in each of the listed programs or plans.

* Please note that references to PRT's Pandemic and Bloodborne Pathogen programs in this Section or in any other Sections of PRT's PTASP is not intended to express or imply that ATU Local 85 supports vaccine mandates in any manner.

APPENDICES

APPENDIX A Definitions

APPENDIX B Regulatory History

APPENDIX C PRT Safety Management System Policy Statement

APPENDIX D Organizational Chart

APPENDIX E Sample Corrective Action Log

APPENDIX F Weather Averages for Pittsburgh / Allegheny County

APPENDIX G RTSRP Reportable Event Decision Tree

APPENDIX H Required Reporting Thresholds

APPENDIX A - Definitions

Definitions

Accident for RTSRP reporting purposes is defined as any incident involving a rail transit vehicle or taking place on property controlled by the transit agency where one or more of the following occurs:

- A loss of life;
- Serious injury to a person;
- An evacuation due to life safety reasons;
- A collision involving a fixed guideway transit vehicle;
- A derailment of a rail transit vehicle, at any location, at any time, whatever the cause; or
- A runaway train.

The PRT must notify the RTSRP and FTA within two hours of an accident that meet the criteria listed above. For a more detailed description of the criteria, please see the Incident/Accident/Hazard Investigation Procedures or see Table 24 for more details.

Accountable Executive (AE) means a single, identifiable individual who is accountable for ensuring that the agency's SMS is effectively implemented, throughout the agency's public transportation system. The Accountable Executive is accountable for ensuring action is taken, as necessary, to address substandard performance in the agency's SMS. The Accountable Executive may delegate specific responsibilities, but the ultimate accountability for the transit agency's safety performance cannot be delegated and always rests with the Accountable Executive.

Administrator means the Federal Transit Administrator or the Administrator's designee.

Collision at Grade Crossing means train to train, train to vehicle, train to object, and train to individual collisions that occur at rail grade crossings, including in mixed traffic environments at street intersections.

Corrective Action Plan means a plan developed by a Rail Transit Agency that describes the actions the Rail Transit Agency will take to minimize, control, correct, or eliminate risks and hazards, and the schedule for taking those actions. Either a State Safety Oversight Agency or FTA may require a Rail Transit Agency to develop and carry out a corrective action plan.

Each CAP shall have the following information:

- Date Identified – Date the CAP was generated.
- Source – What generated this CAP (ex. FTA reporting requirement, Accident/Incident, Hazard, etc.)
- Finding of Non-Compliance – Description of the deficiency or needed improvement.
- Risk Rating – Rating based upon hazard analysis.
- Corrective Action Plan – CAP must clearly address the precipitating event or hazard and outline proposed mitigations.
- Notes/Comments – RTA/RTSRP will enter progress and feedback on open CAP.
- Responsible Party – Individual/department responsible for CAP.
- CAP Issue Date – Date at which RTA submitted CAP to RTSRP.
- CAP Target Date – Proposed date at which the CAP will be completed.
- Transit Agency Status – Open, Awaiting Verification or Closed.

Event means an Accident, Incident or Occurrence.

FRA means the Federal Railroad Administration, an agency within the U.S. Department of Transportation.

FTA means the Federal Transit Administration, an agency within the U.S. Department of Transportation.

Frontline Employee means a person selected by a labor organization representing the plurality of the frontline workforce employed by the recipient or, if applicable, a contractor to the recipient, to the extent frontline employees are represented by labor organizations.

Hazard means 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. Refer to Table 12 for more information must notify the RTSRP within 24 hours or on a monthly basis, depending on the RTSRP reporting requirements of learning of a Reportable Hazard.

Incident means an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a rail transit agency. An incident must be reported to FTA's National Transit Database in accordance with the thresholds for reporting set forth in section 5.4 – Event Notifications of the PRTSRP. If a rail transit agency or State Safety Oversight Agency later determines that an Incident meets the definition of Accident in this section, that event must be reported to the SSOA in accordance with the thresholds for notification and reporting set forth in section 5.4 – Event Notifications of the PRTSRP.

Individual means a passenger; employee; contractor; rail transit facility worker; pedestrian; trespasser; or any person on rail transit-controlled property.

Injury means harm to a person, requiring that person to be transported from the scene of an incident to a hospital or medical facility for treatment.

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

Major Capital Project means a project that involves the construction of a new fixed guideway system or an extension to an existing fixed guideway; involves the rehabilitation of an existing fixed guideway with a total project cost in excess of \$100 million; or is determined by the FTA to be a major capital project because it has determined that FTA Project Management Oversight process will be beneficial to the project.

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

Near Miss means any instance or event that did not result in injury or damage but had the potential to do so.

New Starts Project means any fixed guideway system which utilizes and occupies a separate right-of-way, or rail line, for the exclusive use of mass transportation and other high occupancy vehicles or uses a fixed catenary system and a right-of-way usable by other forms of transportation, which is funded under FTA's 49 U.S.C. § 5309 discretionary construction program.

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

Oversight Agency means the entity, other than the rail transit agency, designated by the state or several states to implement Part 674.

Passenger means a person who is on board, boarding, or alighting from a rail transit vehicle for the purpose of travel.

Passenger Operations means the period of time when any aspect of rail transit agency operations is initiated with the intent to carry passengers.

PennDOT means the Pennsylvania Department of Transportation, an agency within the Commonwealth of Pennsylvania.

Person means a passenger, employee, contractor, pedestrian, trespasser, or any individual on the property of a rail fixed guideway public transportation system.

Program Standard means a written document developed and adopted by the oversight agency, that describes the policies, objectives, responsibilities, and procedures used to provide rail transit agency safety and security oversight.

Public Transportation Agency Safety Plan (PTASP) means the comprehensive agency safety plan for a transit agency, including a Rail Transit Agency, that is required by 49 U.S.C. 5329(d) and based on 49 CFR 673.

Public Transportation Safety Certification Training Program (PTSCTP) means either the certification training program for Federal and State employees, or other designated personnel, who conduct safety audits and examinations of public transportation systems, and employees of public transportation agencies directly responsible for safety oversight, established through interim provisions in accordance with 49 U.S.C. 5329(c)(2), or the program authorized by 49 U.S.C. 5329(c)(1).

Rail Fixed Guideway Public Transit System (RFGPTS) means, as determined by FTA, any light, heavy, or rapid rail system, monorail, inclined plane, funicular, trolley, or automated guideway that:

1. Is not regulated by the Federal Railroad Administration; and
2. Is included in FTA's calculation of fixed guideway route miles or receives funding under FTA's formula program for urbanized areas (49 U.S.C. 5336); or
3. Has submitted documentation to FTA indicating its intent to be included in FTA's calculation of fixed guideway route miles to receive funding under FTA's formula program for urbanized areas (49 U.S.C. 5336).

Rail Transit Agency (RTA) means an entity that operates a rail fixed guideway system.

Rail Transit-Controlled Property means property that is used by the rail transit agency and may be owned, leased, or maintained by the rail transit agency.

Rail Transit Vehicle means the rail transit agency's rolling stock, including, but not limited to passenger and maintenance vehicles.

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

Risk Mitigation means a method or methods to eliminate or by reducing the likelihood or severity of hazards.

RTSRP means the Rail Transit Safety Review Program, the entity authorized by PennDOT to develop, operate, and maintain the safety review program requirements in the Commonwealth, fulfilling safety review requirements for the Commonwealth of Pennsylvania and the Federal Transit Administration (FTA) State safety Oversight Rule (49 C.F.R. 674) and Pennsylvania Act 89.

Safety means freedom from harm resulting from unintentional acts or circumstances.

Safety Risk Management means a process within a Rail Transit Agency's Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.

Safety Management System means the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.

SMS Executive means the person responsible to manage the SMS on a daily basis on behalf of the Accountable Executive and makes sure that SMS is implemented appropriately. The SMS Executive works with key safety personnel on SMS implementation and overall administration and management. The SMS Executive serves as the Agency's Chief Safety Officer (CSO).

Safety and Security Certification means the process applied to project development to ensure that all practical steps have been taken to optimize the operational safety and security of the project during engineering, design, and construction before the start of passenger operation.

Safety Review means a formal, comprehensive, on-site review by the PRTSRP or other oversight authority, such as FTA of the transit agency's safety practices to determine whether they comply with the policies and procedures required under the transit agency's PTASP.

Security means freedom from harm resulting from intentional acts or circumstances.

Serious Injury, as defined in 49 CFR 674, means any injury which: (a) Requires hospitalization for more than 48 hours, commencing within seven calendar days from the date of the injury; (b) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (c) Causes severe hemorrhages, nerve, muscle, or tendon damage; (d) Involves any internal organ or; (e) Involves second- or third-degree burns affecting more than five percent of the body surface.

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

Stop Signal Overrun means an occurrence when a rail transit vehicle fails to stop as required in advance of a stop signal, flag, or other indicator, as specified in a rail transit agency's operating rules and procedures.

State Safety Oversight Agency (SSOA) means an agency established by a State that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth in 49 CFR part 674.

Security and Emergency Preparedness Plan (SEPP) means a document developed and adopted by the rail transit agency, describing its security and emergency preparedness policies, objectives, responsibilities, and procedures.

Vehicle means any rolling stock used on a rail fixed guideway public transportation system, including but not limited to passenger and maintenance vehicles.

APPENDIX B – Regulatory History

Regulatory History

B1. Port Authority Act

The Port Authority of Allegheny County (Port Authority) was created by the Second Class County Port Authority Act of April 6, 1956 (1955 P.L. 1414, No. 465), as amended. This act empowered Port Authorities in counties of the second class as bodies corporate and politic, with power to plan, acquire, construct, maintain, and operate facilities and project for the improvement and development of the port district, and granted Port Authorities the exclusive right to engage in the business of owning, operating and maintaining a transportation system for the transportation of persons in counties of the second class. Port Authority provides these services within Allegheny County through bus operations (including busways), light rail transit (LRT), and an inclined plane. On June 9th, 2022 the Port Authority of Allegheny County officially changed its name to Pittsburgh Regional Transit (PRT).

B2. Federal Transit Act

In response to congressional concern regarding the potential for catastrophic accidents and security incidents on rail transit systems, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) added Section 28 to the Federal Transit Act (codified at 49 U.S.C. Section 5330). This section requires the Federal Transit Administration (FTA) to issue a rule creating the state-managed oversight program for rail transit safety and security.

The FTA published the revised *Rail Fixed Guideway Systems: State Safety Oversight Rule on April 29, 2005* (formerly 49 CFR Part 659), subsequently referred to as State Safety Oversight Rule, (now 49 CFR Part 674).

On March 16, 2016 the FTA published a new State Safety Oversight Rule, 49 CFR 674.

B3. Authority Under 49 U.S.C. 5329(e)

In October 2012, the Moving Ahead for Progress in the 21st Century Act (hereafter “MAP-21”), which includes new provisions for State Safety Oversight agencies, including PennDOT, took effect. MAP-21 creates a new regulatory role for the states implementing State Safety Oversight (SSO) programs for the rail transit fixed guideway systems in their jurisdictions.

Explicit mandates in 49 U.S.C. 5329(e)(3) and 5329(e)(4) now require a State to obtain enforcement authority for its SSO agency that administers SSO programs for the rail

transit agencies in that State. States must provide their SSO agencies with this authority as a condition of the receipt of Federal grant funds apportioned under 49 U.S.C. Chapter 53. In addition, each State must identify the specific authorities and capabilities that it will use to enforce 5329(e) provisions in order to maintain its eligibility for Federal public transportation funding. FTA will evaluate each State's approach and determine its sufficiency.

B4. Authority Under 49 CFR 674

On March 16, 2016, the FTA released the final SSO rule, 49 CFR 674 (hereafter "Part 674"). The effective date for this rule was April 15, 2016. Three years after this date, April 15, 2019 the former SSO rule 49 CFR 659 was rescinded and only Part 674 is in effect.

Part 674 contains several changes that affects SSOA and RTA activities. These changes include new accident notification criteria, new nomenclature, enhanced enforcement authority for SSOAs, and increased SSOA involvement in the corrective action plan (CAP) process.

B5. RTSRP Oversight of 49 CFR 673

On July 19, 2018, the FTA released the final Public Transportation Agency Safety Plan (PTASP) Rule, 49 CFR 673 (hereafter "Part 673"). This rule requires all transit agencies that receive funding under 49 U.S.C. Chapter 53 to develop and maintain a PTASP. As the SSOA, the RTSRP is required to review and approve the PTASP of each covered RTA.

B6. Authority under Pennsylvania's Act 89

In 2013, Pennsylvania enacted an amendment to Title 74 that established enforcement authority for PennDOT's RTSRP. The amendment, also known as Act 89, contains open-ended language to enable PennDOT to comply with any new state or federal oversight regulation of public transportation modes as it is released.

B7. Pennsylvania Rail Transit Safety Review Program

In Pennsylvania, PennDOT is the designated agency (49 CFR Part 674.15) for fixed guideway safety and security oversight in the Commonwealth of Pennsylvania. The RTSRP is authorized by PennDOT to develop, operate, and maintain the safety and security review program. The RTSRP was established in 1991 to fulfill requirements of revised Pennsylvania statutes in Title 74. The current state safety oversight (SSO) program for fixed guideway transit safety dates back to section 3029 of the 1991 Intermodal Surface Transportation Efficiency Act ("ISTEA") (Pub. L. 102-240). In enacting section 3029, Congress determined that the states, not FTA, should be the principal oversight authorities for rail transit within their jurisdictions, given that public

transportation is an inherently local activity which, with few exceptions, does not cross state boundaries. The RTSRP also fulfills the requirements of the FTA SSO Rule 49 C.F.R. § 674, requiring oversight of safety of rail fixed guideway public transportation systems (RFGPTS). The RTSRP reserves the right to update these Procedures and Standards as additional regulation or guidance is released.

The RTSRP is compliant with 49 CFR Part 674.13 requirements that an oversight program is legally and financially independent from covered RFGPTS (also known as rail transit agencies (RTAs)). The RTSRP continues to strengthen the oversight program by incorporating new safety and security standards, initiatives, and identified industry best practices.

This PTASP has been updated to reflect changes in the PRTSRP Procedures & Standards, July 2022 revision.

B8. Bi-partisan Infrastructure Law

On November 15, 2021, The Infrastructure Investment and Jobs Act was signed into law. On November 17, the FTA released a Dear Colleague letter to all transit agencies stating as part of the new Act, the Bi-partisan Infrastructure Law made changes to the current U.S.C. 5329(d) section and would require agencies to implement new provisions within their PTASP. These provisions are; implement strategies to minimize exposure to infectious diseases, safety committees shall be made up of an equal number of frontline employees and management members with the committee approving the ASP and any updates, a risk reduction program focused on a reduction on vehicular (bus) and pedestrian accidents as well as transit worker assaults. The agency shall establish performance targets for the risk reduction programs. Finally, a training program for operations, maintenance and personnel directly responsible for safety within the agency.

B8.1 Bipartisan Infrastructure Law changes to 49 U.S.C § 5329(d)

(d) Public transportation agency safety plan.

(1) In general. Each recipient or State, as described in paragraph (3), shall certify that the recipient or State has established a comprehensive agency safety plan that includes, at a minimum—

(A) a requirement that the board of directors (or equivalent entity) of the recipient approve, or, in the case of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more, the safety committee of the entity established under paragraph (5), followed by the board of directors (or equivalent entity) of the recipient approve, the agency safety plan and any updates to the agency safety plan;

- (B) for each recipient serving an urbanized area with a population of fewer than 200,000, a requirement that the agency safety plan be developed in cooperation with frontline employee representatives;
- (C) methods for identifying and evaluating safety risks throughout all elements of the public transportation system of the recipient;
- (D) strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions, and consistent with guidelines of the Centers for Disease Control and Prevention or a State health authority, minimize exposure to infectious diseases;
- (E) a process and timeline for conducting an annual review and update of the safety plan of the recipient;
- (F) performance targets based on—
 - (i) the safety performance criteria and state of good repair standards established under subparagraphs (A) and (B), respectively, of subsection (b)(2); or
 - (ii) in the case of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more, safety performance measures established under the national public transportation safety plan, as described in subsection (b)(2)(A);
- (G) assignment of an adequately trained safety officer who reports directly to the general manager, president, or equivalent officer of the recipient; and
- (H) a comprehensive staff training program for—
 - (i) the operations personnel and personnel directly responsible for safety of the recipient that includes—
 - (I) the completion of a safety training program; and
 - (II) continuing safety education and training; or
 - (ii) in the case of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more, the operations and maintenance personnel and personnel directly responsible for safety of the recipient that includes—
 - (I) the completion of a safety training program;
 - (II) continuing safety education and training; and
 - (III) de-escalation training; and
- (I) in the case of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more, a risk reduction program for transit operations to improve safety by reducing the number and rates of accidents, injuries, and assaults on transit workers based on data submitted to the national transit database under section 5335, including—

- (i) a reduction of vehicular and pedestrian accidents involving buses that includes measures to reduce visibility impairments for bus operators that contribute to accidents, including retrofits to buses in revenue service and specifications for future procurements that reduce visibility impairments; and
 - (ii) the mitigation of assaults on transit workers, including the deployment of assault mitigation infrastructure and technology on buses, including barriers to restrict the unwanted entry of individuals and objects into the workstations of bus operatorswhen a risk analysis performed by the safety committee of the recipient established under paragraph (5) determines that such barriers or other measures would reduce assaults on transit workers and injuries to transit workers.
- (2) Interim agency safety plan. —A system safety plan developed pursuant to part 659 of title 49, Code of Federal Regulations, as in effect on the date of enactment of the Federal Public Transportation Act of 2012, shall remain in effect until such time as this subsection takes effect.
- (3) Public transportation agency safety plan drafting and certification. —
 - (A) Section 5311.—For a recipient receiving assistance under section 5311, a State safety plan may be drafted and certified by the recipient or a State.
 - (B) Section 5307.—Not later than 120 days after the date of enactment of the Federal Public Transportation Act of 2012, the Secretary shall issue a rule designating recipients of assistance under section 5307 that are small public transportation providers or systems that may have their State safety plans drafted or certified by a State.
- (4) Risk reduction performance targets. —
 - (A) In general. —The safety committee of a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more established under paragraph (5) shall establish performance targets for the risk reduction program required under paragraph (1)(I) using a 3-year rolling average of the data submitted by the recipient to the national transit database under section 5335.
 - (B) Safety set aside. —A recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more shall allocate not less than 0.75 percent of those funds to safety-related projects eligible under section 5307.
 - (C) Failure to meet performance targets. —A recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more that does not meet the performance targets established under subparagraph (A) shall allocate the amount made available in subparagraph (B) in the following fiscal year to projects

described in subparagraph (D).

(D) Eligible projects. —Funds set aside under subparagraph (C) shall be used for projects that are reasonably likely to assist the recipient in meeting the performance targets established in subparagraph (A), including modifications to rolling stock and de-escalation training.

(5) Safety committee. —

(A) In general. —For purposes of this subsection, the safety committee of a recipient shall—

(i) be convened by a joint labor-management process;

(ii) consist of an equal number of—

(I) frontline employee representatives, selected by a labor organization representing the plurality of the frontline workforce employed by the recipient or, if applicable, a contractor to the recipient, to the extent frontline employees are represented by labor organizations; and

(II) management representatives; and

(iii) have, at a minimum, responsibility for—

(I) identifying and recommending risk-based mitigations or strategies necessary to reduce the likelihood and severity of consequences identified through the agency's safety risk assessment;

(II) identifying mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended; and

(III) identifying safety deficiencies for purposes of continuous improvement.

(B) Applicability. —This paragraph applies only to a recipient receiving assistance under section 5307 that is serving an urbanized area with a population of 200,000 or more.

APPENDIX C – SMS Policy Statement

SMS Safety Management Policy Statement

Pittsburgh Regional Transit's Safety Management System Policy Statement

(Issued and Effective per PRT's Public Transportation Agency Safety Plan as of December 2022)

It is the mission and policy of the Pittsburgh Regional Transit (PRT) to provide safe and reliable transportation service for the general public, to provide safe and healthful working conditions for PRT employees, and to comply with all applicable laws and regulations.

PRT is fully committed to a Safety Management System (SMS) and to providing its customers with safe service, and to maintain a strong safety culture and working environment that ensures the safety and health of its employees and protects the environment.

The management of safety is a major consideration in every stage of all PRT activities. PRT is committed to implementing, maintaining and continually improving processes to ensure that all its operational and maintenance activities are supported by reasonable and appropriate allocation of organizational resources and aimed at achieving the highest level of transit safety performance.

All employees, contractors, and consultants are responsible and accountable for the delivery of this highest level of safety performance, starting with PAAC Board approval of this Safety Management Policy Statement, PRT's Public Transit Agency Safety Plan (PTASP) and designation of PRT's Chief Executive Officer (CEO) as the agency's designated Accountable Executive.

PRT's commitment is to:

- Support its SMS by providing appropriate resources to support an organizational culture that fosters safe operational practices, encourages effective safety reporting and communication, and actively manages safety with the same attention to results as that given to the other critical management systems of PRT.

To implement PRT's Public Transportation Agency Safety Plan, PRT's employees, contractors, and consultants must focus on the following Safety Management System components:

- PRT's Safety Management Policy Statement;
- PRT's Safety Risk Management process for identifying hazards and analyzing, assessing, and mitigating safety risk to the lowest reasonable level;
- Safety Assurance to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that PRT meets or exceeds its safety objectives through the collection, analysis, assessment, and trending of information; and
- Safety Promotion to support SMS as applied to PRT, including internal and external safety communications and management and employee training.

PRT's CEO (Accountable Executive) has appointed the Chief Safety Officer as the agency's designated SMS Executive, with primary responsibility for maintaining and updating PRT's PTASP on an ongoing basis. All PRT employees, contractors and consultants are responsible for working safely and assuring that PRT's service is delivered safely for all who come in contact with it.

Questions or concerns, please contact your System Safety Department representative.


Katharine Kelleman
CEO


Burt Jennings
Chief Safety Officer

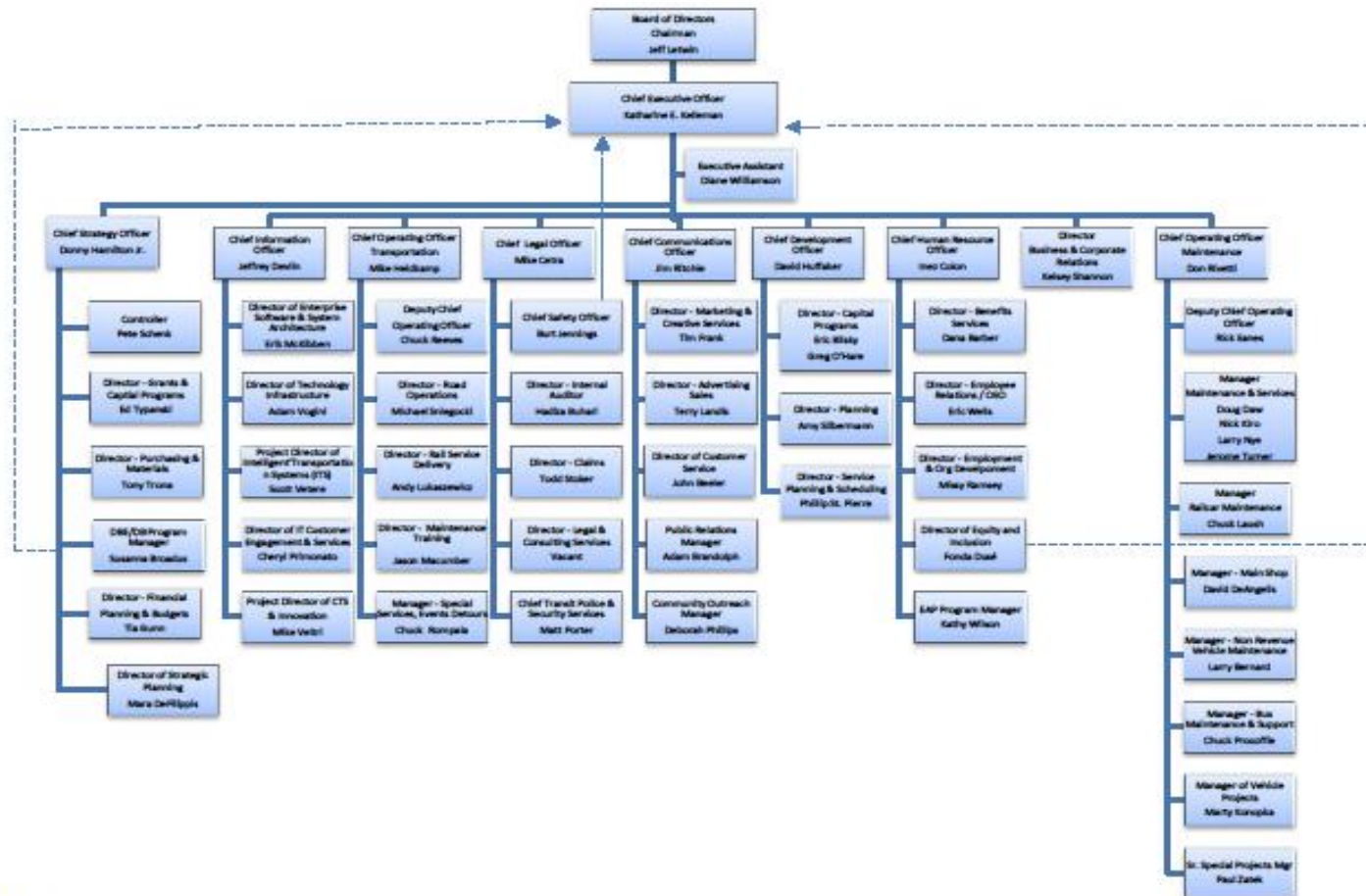
APPENDIX D – Organizational Chart

EXECUTIVE LEADERSHIP ORGANIZATIONAL CHART

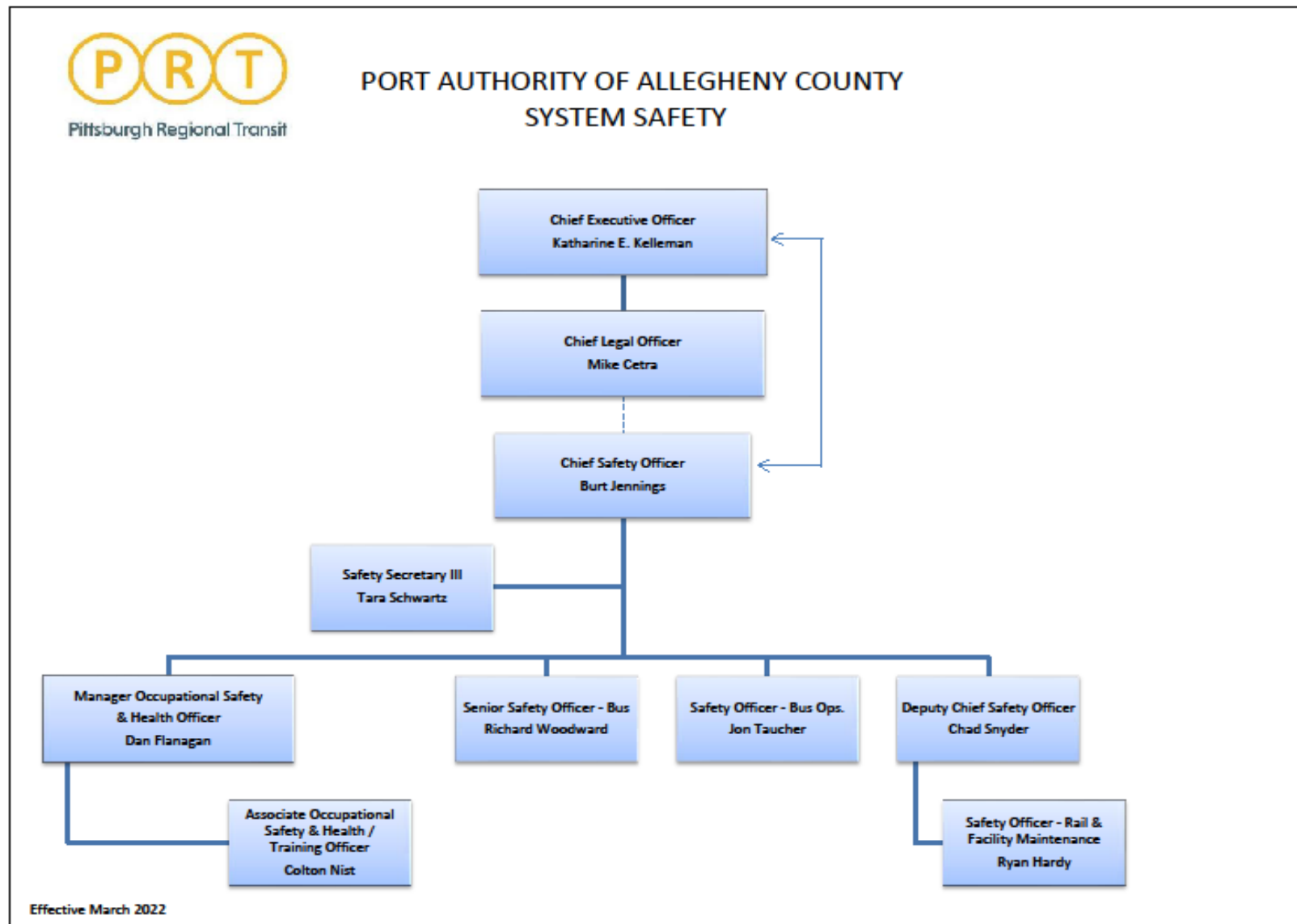
SYSTEM SAFETY DEPARTMENT ORGANIZATIONAL CHART



PORT AUTHORITY OF ALLEGHENY COUNTY



Effective April 2022



APPENDIX E – Sample Corrective Action Log

Sample Corrective Action Log

Browser: <https://www.industrysafe.com/TRAINCdn/> | Corrective Actions Summa... x

File Edit View Favorites Tools Help

Home Dashboard Incidents Hazards **Corrective Actions** Reports & Analysis Employees PennDOT | RTSRP

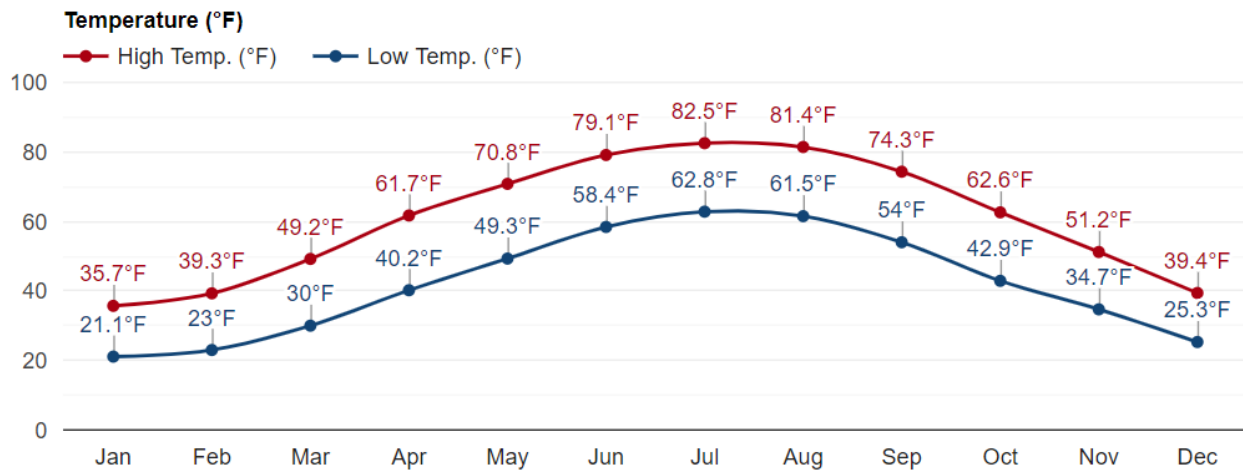
Search Criteria:
Date Identified: 1/1/1998 - 4/1/2020
Status: Open

Corrective Actions Summary 39 out of 39 records										
System ID ▲	Transit Agency	Originating System ID	Originating Type	Date Identified	RTSRP Investigator	Source	CAP Target Date	Status	Number of Days	Closed
1424	PAAC		Unlinked	12/15/2016	Mike Blauvelt	RTSRP Audit - Safety	09/30/2017	Open	8	Open
1500	PAAC		Unlinked	03/08/2017	Mike Blauvelt	RTSRP Audit - Safety	10/31/2017	Open	39	Open
1501	PAAC		Unlinked	03/08/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1502	PAAC		Unlinked	03/08/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1503	PAAC		Unlinked	03/08/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1504	PAAC		Unlinked	03/08/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1505	PAAC		Unlinked	03/08/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1506	PAAC		Unlinked	03/01/2017	Mike Blauvelt	RTSRP Audit - Safety	09/30/2017	Open	8	Open
1508	PAAC		Unlinked	03/01/2017	Mike Blauvelt	RTSRP Audit - Safety	09/30/2017	Open	8	Open
1510	PAAC		Unlinked	03/09/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1511	PAAC		Unlinked	03/10/2017	Mike Blauvelt	RTSRP Audit - Safety	09/30/2017	Open	8	Open
1512	PAAC		Unlinked	03/10/2017	Mike Blauvelt	RTSRP Audit - Safety	03/31/2018	Open	190	Open
1513	PAAC		Unlinked	03/10/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1640	PAAC		Unlinked	04/19/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1641	PAAC		Unlinked	04/19/2017	Mike Blauvelt	RTSRP Audit - Safety	03/31/2018	Open	190	Open
1642	PAAC		Unlinked	04/19/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1643	PAAC		Unlinked	04/19/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1644	PAAC		Unlinked	04/19/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1645	PAAC		Unlinked	07/13/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open
1646	PAAC		Unlinked	07/13/2017	Mike Blauvelt	RTSRP Audit - Safety	12/31/2017	Open	100	Open

APPENDIX F – Weather

Weather – Pittsburgh and Allegheny County (Average)

Average temperature Pittsburgh, PA



The average high temperature in January: **35.7°F**
The average high temperature in February: **39.3°F**
The average high temperature in March: **49.2°F**
The average high temperature in April: **61.7°F**
The average high temperature in May: **70.8°F**
The average high temperature in June: **79.1°F**

The average high temperature in July: **82.5°F**
The average high temperature in August: **81.4°F**
The average high temperature in September: **74.3°F**
The average high temperature in October: **62.6°F**
The average high temperature in November: **51.2°F**
The average high temperature in December: **39.4°F**

The warmest month (with the highest average high temperature) is **July** (82.5°F). The month with the lowest average high temperature is **January** (35.7°F).

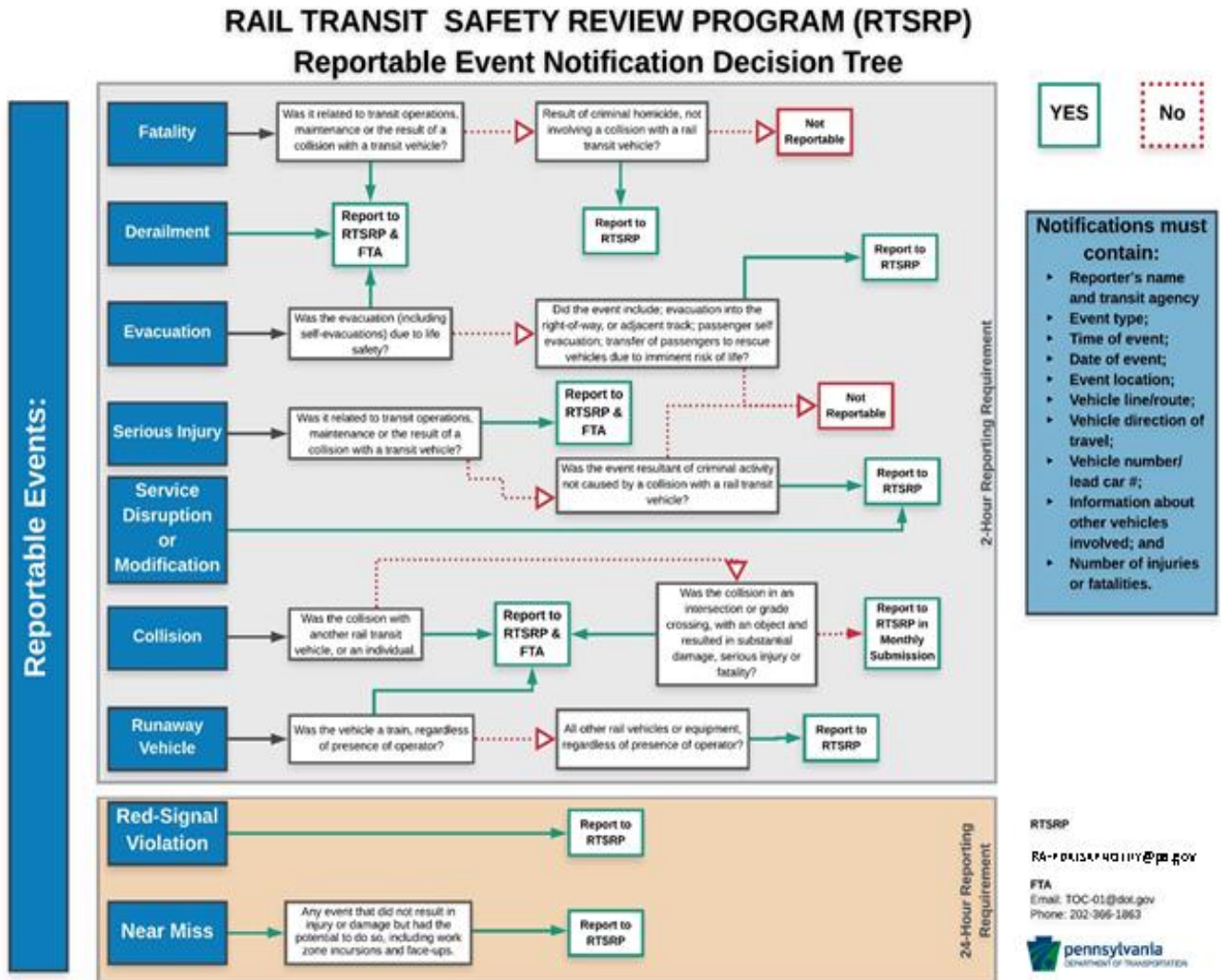
The average low temperature in January: **21.1°F**
The average low temperature in February: **23°F**
The average low temperature in March: **30°F**
The average low temperature in April: **40.2°F**
The average low temperature in May: **49.3°F**
The average low temperature in June: **58.4°F**

The average low temperature in July: **62.8°F**
The average low temperature in August: **61.5°F**
The average low temperature in September: **54°F**
The average low temperature in October: **42.9°F**
The average low temperature in November: **34.7°F**
The average low temperature in December: **25.3°F**

The month with the highest average low temperature is **July** (62.8°F). The coldest month (with the lowest average low temperature) is **January** (21.1°F).

APPENDIX G – RTSRP Decision Tree

RTSRP Reportable Event Decision Tree



(Source: Appendix E from the PRTSRP Procedures and Standards, July 2022)

APPENDIX H – Reporting Thresholds

Required Reporting Thresholds

RTSRP Reportable Event Type	Investigation Report Required?
Accidents: Reportable to the RTSRP within two (2) hours of event.	
Fatality A death or suicide confirmed within 30 calendar days of a reportable event. Note: Fatalities resulting from illness or other natural causes are excluded.	Yes
Serious Injury Any serious injury sustained by: <ul style="list-style-type: none"> (a) a passenger on a fixed guideway transit vehicle (including any serious injury sustained in the process of boarding or alighting); (b) an individual making contact with a fixed guideway transit vehicle; or (c) an RTA employee in the delivery of fixed guideway transit operations. Serious Injury: <ul style="list-style-type: none"> (a) Requires hospitalization for more than 48 hours, commencing within seven (7) calendar days from the date the injury was received; (b) Results in a fracture of any bone (except simple fractures of fingers, toes, or nose); (c) Causes severe hemorrhages, nerve, muscle, or tendon damage; (d) Involves any internal organ; or (e) Involves second-or third-degree burns, or any burns affecting more than five percent of the body surface. 	Yes
Collision A collision of any fixed guideway transit vehicle, at any location, at any time that: <ul style="list-style-type: none"> (a) Involves another fixed guideway transit vehicle; (b) Occurs in a grade crossing; (c) Results in substantial damage; or (d) Involves an individual not inside a vehicle. 	Yes

RTSRP Reportable Event Type	Investigation Report Required?
Runaway Vehicle Runaway fixed guideway vehicle on the mainline or in a yard, defined as uncontrolled movement of a train, vehicle, or other equipment regardless of the presence of an operator.	Yes
Derailment Derailment of any vehicle, at any location, at any time, whatever the cause.	Yes
Evacuation Persons withdrawn or removed from rail transit vehicles or facilities for life safety reasons, into the right-of-way, or self-evacuations to a location that may put passengers in imminent danger. Life Safety Reason: A situation such as a fire, the presence of smoke, fuel leak, electrical, or other hazard, that constitutes an imminent danger to passengers, employees, contractors, or other persons. Evacuations for security purposes, including but not limited to arson; suspicious packages and objects; bomb threats; and chemical/biological/nuclear and radiological releases also constitute life safety reasons. Note: Reporting is not required for the offloading of passengers at a <i>platform</i> for a mechanical failure, or transfer of passengers to a rescue train unless there was imminent danger to passengers.	Yes
Other Any safety event for which the RTA notifies the National Response Center (NRC) or the NTSB.	Upon RTSRP Request
Incidents: Reportable to the RTSRP within 24 hours of event.	
Red Signal Violation Note: The reporting timeframe begins when the violation is confirmed.	Yes
Fire Event	Upon RTSRP Request

RTSRP Reportable Event Type	Investigation Report Required?
Near-miss Any event that did not result in injury or damage but had the potential to do so, including face-ups and work zone incursions.	Upon RTSRP Request
Incline Plane Cable or Major Component Failure	Yes
Service Disruption of Modification Closure or modification of all, or a portion of a rail transit system due to a hazardous condition, threat or government request.	Upon RTSRP Request
Assault Any serious injury within 30 days as a result of criminal actions not related to operations or maintenance.	Upon RTSRP Request
Homicide Any death within 30 days as a result of criminal actions not related to operations or maintenance.	Upon RTSRP Request
Occurrences: Reportable to the RTSRP monthly. (15th day following the month of the event)	
Revenue Vehicle Door Event, including: Any potentially hazardous door operation on a revenue vehicle, including: (a) Door opening during train movement; (b) Door opening on the wrong side or off-platform; or (c) An un-commanded door opening.	Upon RTSRP Request
Falls to the Track Persons entering the track area – accidental (known to the RTA).	Upon RTSRP Request
Trespassing Unauthorized persons entering the track area in subway/tunnel – trespassing (known to the RTA).	Upon RTSRP Request
System Failure Any signal or control system failure that does not result in fail-safe.	Upon RTSRP Request
Collision A collision of any fixed guideway transit vehicle not meeting the requirement for reporting as an accident.	Upon RTSRP Request