RESOLUTION OF THE BOARD OF TRUSTEES OF THE UTAH TRANSIT AUTHORITY APPROVING AND REAUTHORIZING THE TRANSIT AGENCY SAFETY PLAN

R2024-05-03 May 22, 2024

WHEREAS, Utah Transit Authority (the "Authority") is a large public transit district organized under the laws of the State of Utah and created to transact and exercise all of the powers provided for in the Utah Limited Purpose Local Government Entities – Special Districts Act and the Utah Public Transit District Act; and

WHEREAS, the Authority operates a light rail system known as TRAX (the "TRAX System"), as well as other transit services; and

WHEREAS, the TRAX System is a rail fixed guideway public transit system, the safety of which is regulated by the Utah Department of Transportation under the Federal Transit Administration's state safety oversight laws and regulations (collectively the "SSO Rules"); and

WHEREAS, pursuant to the SSO Rules, the Authority is required to develop a comprehensive public transit agency safety plan (the "TASP") to: (i) identify and evaluate safety risks related to the TRAX System; (ii) implement strategies mitigating such risks; (iii) establish a process for annual reviews of the safety plan; (iv) set safety performance targets; (v) assign safety responsibilities; and (v) establish a staff safety training program; and

WHEREAS, the SSO Rules require that the TASP, and any updates to the TASP, be approved by the Board of Trustees for the Authority (the "Board") and executed by a single executive who has ultimate responsibility for implementing the TASP (the "Accountable Executive"); and

WHEREAS, the TASP also covers all other modes of transit operated by the Authority, as required by the Federal Transit Administration; and

WHEREAS, the Joint Safety Committee of the authority, composing of representatives of management and labor approved the 2023 TASP on December 29, 2022, and was approved by the Board in Resolution R2023-04-06; and

WHEREAS, the Authority, upon review, determines that the TASP approved by the Board in Resolution R2023-04-06 suits the needs of the Authority and should be reauthorized in its entirety without changes or modifications.

NOW, THEREFORE, BE IT RESOLVED by the Board:

1. That the Board hereby reauthorizes the TASP approved in Resolution R2023-04-06.

2. That the reauthorization of the TASP shall be in effect until superseded.

3. That Resolution R2023-04-06, approving the TASP and Accountable Executive for 2023 is hereby superseded.

4. That the Board hereby designates the Authority's Executive Director as the Accountable Executive and authorizes the Executive Director to execute and deliver the reauthorized TASP on behalf of the Authority.

5. That the Board hereby ratifies any and all actions previously taken by the Authority's management, staff, and counsel to prepare the TASP.

6. That the corporate seal be attached hereto.

Approved and adopted this 22nd day of May 2024.

DocuSigned by:
86E38485ACBE4D0...

Carlton Christensen, Chair
Board of Trustees

ATTEST:

DocuSigned by:
8D8A6B67F3AA459...

Secretary of the Authority

Approved As To Form:

DocuSigned by:
0F6F046DE4724A2...

Legal Counsel

Exhibit A

(Reauthorized 2023 Transit Agency Safety Plan)

UTAH TRANSIT AUTHORITY

TRANSIT AGENCY SAFETY PLAN (TASP)

January 2023

Revision Date	Description of Revisions	Person Issuing Changes
November 1999	Original SSPP issue which includes the System Security Plan	Steve Cain UTA Risk Manager
January 2001	Annual Update	Ed Buchanan Rail Safety Administrator
January 2002	Annual Update (TRAX Only Removal of Bus info.)	Ed Buchanan Rail Safety Administrator
January 2003	Annual Update (Removal of System Security Plan)	Ed Buchanan Rail Safety Administrator
January 2004	Annual Update	Ed Buchanan Rail Safety Administrator
January 2005	Annual Update	Ed Buchanan Rail Safety Administrator
April 2006	Final Rule 659 changes – New standards from UDOT	Ed Buchanan Rail Safety Administrator
April 2007	Implemented the SSPP requirements for commuter railroads using The Manual for the Development of SSPP for Commuter Railroads 5/15/06	Ed Buchanan Rail Safety Administrator
January 2009	Annual Update	Ronald W. Nickle Rail Safety Administrator
December 2009	Annual Update	Ronald W. Nickle Rail Safety Administrator
April 2010	Annual Update	Ronald W. Nickle Rail Safety Administrator
February 2011	Annual Update	Ronald W. Nickle Rail Safety Administrator
October 2012	Annual Update	Ed Buchanan Safety Department
January 2013	Annual Update	Darin L. Francom Safety Department

January 2014	Annual Update	Darin L. Francom Safety Department
January 2015	Annual Update, Change document to Transit Agency Safety Plan (TASP) format in preparation for the implementation of MAP-21 requirements from 49 USC 5329 (e)	Darin L. Francom Ed Buchanan Safety Department
January 2016	Annual Update	Darin L. Francom Ed Buchanan Safety Department
January 2017	Annual Update	Darin L. Francom Ed Buchanan Safety Department
January 2018	Annual Update	Darin L. Francom Ed Buchanan Safety Department
January 2019	Annual Review and Update	Darin L. Francom Sheldon Shaw Safety Department
January 2020	Annual Review and Update	Darin L. Francom Travis King Safety Department
January 2021	Annual Review and Update	Travis King Tina Bartholomew Safety Department
January 2022	Annual Review and Update	Travis King Safety Department
January 2023	Annual Review and Update	Travis King Kent Muhlestein Safety Department

Table of Contents

DEFINITIONS AND ACRONYMNS

DEFINITIONS

Accident	In accordance with 49 CFR Part 674, an event that involves any of the following: a loss of life; a report of a serious injury to a person; a collision involving a rail transit vehicle; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.
Confidential Close-Call Reporting System (C3RS)	A voluntary confidential program allowing employees and contractors to report close calls. The program provides a safe environment for employees and contractors to report unsafe events and conditions.
Case Management System (CMS)	The online database and process that makes up the C3RS program.
Certifiable Items List (CIL)	A UTA-approved list of safety and security certifiable elements and sub-elements.
Corrective Action Plan (CAP)	A plan developed by the rail transit agency that describes the actions the rail transit agency will take to minimize, control, correct, or eliminate hazards, and the schedule for implementing those actions.
Event	Means, in accordance with 49 CFR Part 674, an Accident, Incident, Occurrence, or serious occurrence.
Face Up	When two trains are moving toward each other on the same track due to system or operator error and have the potential to collide.
Front Runner System Safety Plan (FRSSP)	Commuter Rail's structured program with proactive processes and procedures, developed and implemented to identify and mitigate or eliminate hazards and the resulting risks (mirrors TASP). See 49 CFR Part 270.
Hazard	Any real or potential condition that can cause injury, illness, or death; damage to or loss of a system, equipment, or property; or damage to the environment.
Hazard Management	The process of identification and analysis of a hazard to mitigate, control, or accept it.
Incident	In accordance with 49 CFR Part 674, an event that involves any of the following: a personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a rail transit agency.
National Transit Database (NTD)	An Internet-based system for reporting of major and non-major events administered by the FTA at www.NTDProgram.com

Occurrence	An event where there is no personal injury, nor property damage that causes disruption to rail services. Such events include vandalism/theft.
Passenger	A person who is boarding, on board, or alighting from a transit vehicle for the purpose of travel.
Positive Train Control (PTC)	A system that uses communication-based/processor-based train control technology that is capable of reliably and functionally preventing train-to-train collisions, overspeed derailments, incursions into established work zone limits, and the movement of a train through a main line switch in the wrong position.
Rail Fixed Guideway System (RFGS)	As determined by FTA, any light, heavy, or rapid rail system, monorail, inclined planer, funicular, trolley, or automated guideway not regulated by the FRA, that is included in FTA's calculation of fixed guideway route miles or receives funding under formula program for urbanized areas.
Rail Transit Controlled Property	A property that is used by the rail transit agency and may be owned, leased, or maintained by the rail transit agency.
Rail Transit Vehicle	The rail transits agency's rolling stock, including, but not limited, to passenger or maintenance vehicles.
Serious Occurrence	A UDOT-defined safety event category that requires a comprehensive accident-level investigation.
Revenue Service Operation	Any transit service operation that is available for public use.
Risk	An expression of possible loss over a specified period or number of operational cycles. It may be expressed as the product of hazard severity and probability.
Rule	The regulations, promulgated by the Federal Transit Administration, regarding the state safety oversight of rail fixed guideway systems. The 49 CFR Part 659 Final Rule became effective May 1, 2005.
Safety	Freedom from harm resulting from unintentional acts or circumstances.
Safety Critical	A term applied to any condition, event, operation, process, or item whose proper recognition, control, performance, or tolerance is essential to safe system operation (e.g., safety critical function, safety critical path, safety critical component).
S\\ Or S Drive Or Safety Drive	This is the shared network drive for the safety department, found on the UTA network at \\users\departments\safety department.
Safety Management System	A method of identifying hazards and controlling risks in a work and operational environment that continually monitors these methods for effectiveness.

Serious Injury	Serious injury means, in accordance with 49 CFR Part 674, any injury which: 1. Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received; 2. Results in a fracture of any bone (except simple fractures of fingers, toes, or nose); 3. Causes severe hemorrhages, nerve, muscle, or tendon damage; 4. Involves any internal organ; or 5. 5. Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.)
State Safety Oversight Agency (SSOA)	State Safety Oversight Agency (SSOA) means the entity, other than the rail transit agency, designated by the state or several states to implement the safety and security oversight of rail transit agencies. In particular for this document, SSOA refers to the Utah Safety Oversight Program, managed by the Utah Department of Transportation (UDOT).
System Life Cycle	All phases of the system's life including design, research, development, test and evaluation, production, deployment (inventory), operations, support, and disposal.
UDOT Program Procedures and Standards	Program Procedures and Standards means a written document developed and adopted by the oversight agency (UDOT), that describes the policies, objectives, responsibilities, and procedures used to provide rail transit agency safety and security oversight.
System Security Plan (SSP)	Document describing the responsibilities and procedures for security of a system.
Temporal Separation	Operating conventional freight/passenger and transit rail equipment at completely distinct periods of the day, and procedures to ensure strict observation of the defined operating windows.

ACRONYMS

AEG	Accident Evaluation Group
APTA	American Public Transportation Associates
ARC	Accident Review Committee
AC	Activation Committee
BSC	Bus Safety Committee
CAP	Corrective Action Plan
CAR	Corrective Action Request
CCC	Configuration Control Committee
ED	Executive Director (UTA)
CFR	Code of Federal Regulations
CIL	Certifiable Items List
CR	Commuter Rail
CSC	Construction Safety Committee
DSS	Director of Safety & Security
DHS	Department of Homeland Security
EPP	Emergency Preparedness Plan
FAST	Fixing America's Surface transportation
FHR	Final Hazard Rating
FRA	Federal Railroad Administration
FRSSP	Front Runner System Safety Program
FTA	Federal Transportation Administration
GM	General Manager
GMSSC	General Manager's Safety and Security Committee
IHR	Initial Hazard Rating
MAP-21	Moving Ahead for Progress in the 21st Century
MOC	Management of Change
NCR	Non Conformance Report
NRC	National Response Center
NTD	Nation Transit Database
NTSB	National Transportation Safety Board
OHA	Operational Hazard Analysis
PAR	Preventive Action Request

PHA	Preliminary Hazard Analysis
POC	Point of Contact
PTC	Positive Train Control
QA	Quality Assurance
QC	Quality Control
RAP	Rail Activation Plan
RFGS	Rail Fixed Guideway System
RGM	Regional General Manager
RSC	Rail Safety Committee
SDS	Safety Data Sheets
SMS	Safety Management System
SOP	Standard Operating Procedure
SSCVR	Safety and Security Certificate Verification Report
SSO	State Safety Oversight
SSP	System Security Plan
SSPP	System Safety Program Plan (replaced by TASP)
SSPS	System Safety Program Standard
SSRC	Safety and Security Management Review Committee
SSWG	Safety and Security Working Group
TASP	Transit Agency Safety Plan (replaces SSPP)
TOC	Transportation Operations Center
TSA	Transportation Safety Administration
TVA	Threat and Vulnerability Assessment
UDOT	Utah Department of Transportation
UOSH	Utah Occupational Safety and Health Administration
UTA	Utah Transit Authority

I SAFETY MANAGEMENT POLICY

The Transit Agency Safety Plan framework starts with the Safety Management Policy. The Safety Management Policy section is UTA's commitment to safety, its objectives, safety goals, the organizational structure established, and plans written to obtain these goals and objectives.

1.1 AUTHORITY AND POLICY STATEMENT

1.1.1 INTRODUCTION

Utah Transit Authority (UTA) is a special transportation district of the state of Utah with its headquarters at 669 West 200 South, Salt Lake City, Utah, 84101. UTA was created on March 2, 1970, by the Utah Legislature. UTA is a multimodal agency comprised of light rail (Trax), commuter rail (Front Runner), bus, and special services.

UTA's mission is to provide integrated mobility solutions to service life's connections, improve public health and enhance quality of life. In accordance with the directives of Moving Ahead for Progress in the 21st Century Act, (MAP-21) and Fixing America's Surface Transportation (FAST) Act, UTA undertook the conversion of the System Safety Program Plan (SSPP) into the Transit Agency Safety Plan (TASP) in 2015. The TASP consists of a series of policies and procedures, which must be undertaken to ensure the safety of our customers, employees, emergency responders, and the general public. Development of the TASP was completed in accordance with Title 49 Code of Federal Regulations (CFR) Chapter 53, Utah Department of Transportation (UDOT) State Safety Oversight (SSO) Program Procedures and Standards; Federal Transportation Administration (FTA) and Federal Railroad Administration (FRA); rules and regulations and Utah Occupational Safety and Health Administration (Utah OSHA). The TASP is the system-wide governing safety document for all transit modes operated by UTA.

1.1.2 AUTHORITY

FTA regulates by granting authority to develop state safety oversight programs, as defined by 49 CFR 674 - In 2017 UDOT became certified under Part 674.

The FTA recognizes UDOT, as the state safety oversight agency for Utah. UDOT SSO is FTA's appointed safety oversight agency, working cooperatively to regulate UTA's light rail transit (TRAX/Streetcar), by ensuring compliance with state and federal requirements, regulations, and guidance, as applicable.

The FTA functions as both an administrator of funds for capital projects and as a federal regulator as defined by 49 CFR 659, 670 and 673. The FTA conducts regular audits of the state safety oversight agency (UDOT-SSOA), to determine the SSO's and UTA's compliance to the FTA's general requirements. UTA's light rail service TRAX/Streetcar is regulated by the FRA, FTA, and UDOT SSO agencies. Portions of TRAX right-of-way are shared with freight operations. Limited-freight operations are achieved with freight railroads through a temporal separation agreement and, and as such come under FRA jurisdiction oversight.

UTA's commuter rail service (Front Runner) is fully regulated by the FRA, and is not regulated by the UDOT-SSO, or the FTA.

1.1.3 POLICY STATEMENT

Utah Transit Authority (UTA) promotes a positive safety culture and creates a workplace that is safe, healthy and injury free. The safety and health of UTA's employees, our most valuable asset, is our first priority. This policy applies to all personnel and every aspect of the company's activities. Having a positive safety culture must include ownership by each employee, a willingness to identify and correct safety deficiencies, and effective communication.

UTA utilizes a Safety Management System (SMS) that prevent accidents and reduces risk of injury and minimizes damage to property and equipment. We work proactively towards identifying and reducing the existence of hazards and risks in the workplace and in our system. As the Accountable Executive for all operations and activities, I ensure our SMS is robust and successful, and adequately resourced. The Director of Safety and Security manages the SMS Program under my authority.

UTA leadership actively prevents workplace incidents, injuries and illnesses and provides support for safety program initiatives. They utilize the employee reporting program which achieves a safer, healthier workplace; keep employees informed about workplace safety and health hazards; and regularly review the company safety and health program.

UTA managers are responsible for supervising and training workers in safe work practices. They enforce company safety rules and foster eliminating hazardous conditions. Supervisors lead safety efforts by example.

UTA expects and encourages all employees to participate in safety and health program activities which include reporting hazards, reporting unsafe work practices, reporting near misses and accidents immediately to their supervisor or a safety committee representative. All employees must wear required personal protective equipment (PPE) when required. Employees serve as Safety Ambassadors by working safely, complying with requirements, and serving as an example to others.

Employees who act to prevent an injury or who reports any incident, close call or hazard will not be subject to disciplinary actions related to those acts. All employees must abide by the safety standards and procedures set forth in UTA policies. Elements such as illegal activity, negligence, acts of willful misconduct, or undue care and attention shall be considered outside the scope of this policy.

Jay Fox
Executive Director
Utah Transit Authority

Sheldon Shaw
Director of Safety and Security
Utah Transit Authority

1.1.4 EXECUTIVE SIGNATURES

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

As UTA Executives and Senior Leaders, we have reviewed and endorse the UTA Transit Agency Safety Plan. We also understand that we have the authority and responsibility for day-to-day implementation and operation of UTA's Safety Management System (SMS).

Cherryl Beveridge
Chief Operating Officer

Andres Colman
Regional GM Salt Lake BU

William Greene
Chief Financial Officer

Jonathan Salazar
Acting Regional GM Mt. Ogden BU

Nichol Bourdeaux
Chief Planning & Engagement Officer

Mary DeLaMare-Schaefer
Regional GM Timpanogos BU

Kim Shanklin
Chief People Officer

Ryan Taylor
Special Services GM

Steve Wright
Chief Communications Officer

Camille Glenn
Acting Light Rail General Manager

Alisha Garrett
Chief Enterprise Strategy Officer

Bruce Cardon
Commuter Rail General Manager

Mary DeLoretto
Chief Service Development Officer

Kevin Anderson
Director of Maintenance Support

David M. Wilkins
Assistant Attorney General Counsel
Transit Law Section

Bryan Sawyer
Director of Fleet Engineering

1.2 GOALS AND OBJECTIVES

The Transit Agency Safety Plan (TASP) establishes formal structure and processes to be used by UTA to identify, assess, track, control, minimize, and resolve hazards associated with UTA bus and rail systems. The TASP will be used as a means of preventing injuries, incidents, accidents, system disruption, environmental damage, and other losses. It demonstrates UTA's commitment to safety and compliance through loss prevention programs. The plan is consistent with federal, state, and local regulations, and it sets forth procedures to comply with standards and conditions of industry, 49 CFR Part 659, UDOT's SSO Program Standards, and applicable FRA rules and regulations applicable to TRAX and FrontRunner as contained in 49 CFR.

The TASP applies to the planning, design, procurement, construction, activation, operations, and maintenance services of the bus and rail system. The TASP is approved by and implemented under the direction of the General Manager's Safety and Security Committee (GMSSC). UTA embraces and participates with the Utah Department of Transportation in achieving the statewide goal of “Zero Fatalities” program. “This is a goal that everyone can live with”.

UTA's annual safety objectives are:

A. Avoidable accident rate per 100,000 miles:
    a. Bus less than 1.0
B. FRA Reportable accident rate per 100,000 miles:
    a. FrontRunner less than 0.5
C. Safety Performance Measure: Injuries per 100,000 miles:
    a. Light Rail less than 1.1
    b. Bus less than 0.2
D. Safety Performance Measure: Fatalities per 100,000 miles. UTA’s goal is zero fatalities:
    a. Light Rail 0.0
    b. Bus 0.0
    c. FrontRunner 0.0
E. Safety Performance Measure: Safety events per 100,000 miles:
    a. Light Rail less than 2.5
    b. Bus less than 0.35
F. Safety Performance Measure: System Reliability. Mean distance between major mechanical failures:
    a. Light Rail greater than 7,000 miles
    b. FrontRunner greater than 14,000
    c. Bus Fixed + Route Deviation greater than 18,000 miles
    d. Paratransit greater than 23,000 miles
G. Total monthly employee industrial injuries less than .51 per 100 employees
    a. 10% reduction of OSHA reportable injuries
H. Eliminate or mitigate Serious and High Hazards

1.2.1 Goals and Management Responsibilities

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

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

The GMSSC is responsible for the development of goals for the TASP. The Safety and Security Director is responsible to report directly to the GMSSC on compliance with the TASP. The TASP's intent is to:

a. Establish a clearly defined safety structure with lines of authority and responsibility to implement the program, processes, and policies that integrates safety into all aspects of UTA functions.
b. Provide means of measuring and achieving UTA safety goals and initiatives, and compliance with rules and regulations.
c. Provide a comprehensive hazard management program to effectively identify and resolve issues.
d. Set procedures for review, approval, and documentation of modifications to existing systems, vehicles, facilities, and equipment.
e. Set processes to address safety issues for activation of new systems and modifications to existing systems, facilities, and vehicles prior to initiation of service.
f. Establish standards for emergency preparedness and management.
g. Set procedures for conducting continual internal audits, and inspections to evaluate TASP compliance.
h. Set procedures for ensuring compliance to safety rules and regulations that impact operations or maintenance.
i. Set procedures for conducting an ongoing maintenance inspections program of vehicles, equipment, facilities, and maintenance cycles, with documentation and the integration of identified safety concerns into the hazard management process.
j. Set safety training standards for employees and contractors.
k. Establish a configuration management control process for modifications during operations.
l. Establish standards for and compliance with the hazardous materials program.
m. Establish standards for and compliance with the drug and alcohol program.
n. Establish standards for and compliance with procurement processes.

1.2.2 Corporate Safety Policies

Guided by the principles contained in this TASP, the Director of Safety and Security, under the direction of, and as approved by the GMSSC, has developed specific corporate safety and loss control policies. These policies set the framework for guiding the safety program. All UTA corporate safety policies including UTA's TASP are available on the UTA intranet. UTA employees are notified via company email on an annual basis of the newly revised TASP along with its location within UTA's Intranet.

1.2.3 Integrating Safety into all Aspects of UTA

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

We accomplish this through safety first messages at UTA meetings, safety committee meetings, weekly Safety messages, monthly safety posters, identification and mitigation of hazards, proactive reviews and inspections to identify potential hazards.

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

a. Safety is part of the Planning Departments "Next Tier" planning meetings to plan for safety in new projects at the earliest opportunity.
b. Safety participates in the Transit Oriented Development (TOD) meetings to identify and raise safety concerns.
c. In new construction projects – safety is considered in Construction Safety Committee (CDC), Design and Construction Meeting, Safety and Security Working Group (SSWG), and Activation Committee (AC) meetings.
d. Safety has representation in the Technology Advisory Group in selection and implementation of new technology programs.
e. Safety works with public relations for signs, vehicle wraps, handouts, wristbands, billboards, commercials, and social media efforts to maximize the safety message to the community.
f. Safety is fully incorporated into training in business units, conducts Roadway Worker Protection, Safety Management System (SMS), Security/Incident Command Structure training, and presents multiple updates at Manager, Corporate Staff, and Executive Team meetings.

1.3 Overview of Management Structure

1.3.1 UTA Board of Trustees and Executive Staff

UTA was incorporated on March 2, 1970, under the authority of the Utah Public Transit District Act of 1969 for the purpose of providing a public mass transportation system for Utah communities.

The governance structure of UTA includes a 3-member full time board of trustees, which is the legislative body for UTA and determines all questions of policy. UTA's board of trustees appoints the Executive Director (ED), who is the Accountable Executive for safety and asset management. Under 2018 legislation, the board hires, sets the salaries, and develops performance targets and evaluations for the Executive Director, Internal Auditor, Chief People Officer, Chief Service Development Officer, Chief Operating Officer, Chief Financial Officer, the Chief of Planning and Engagement, and the Chief of Enterprise Strategy. The Executive Director is charged with certain responsibilities, some of which require coordination with, or providing advice to, the board of trustees. Legal counsel is provided by the Utah Attorney General's Office.

The ED has full charge of the acquisition, construction, maintenance, and operations of the system and facilities of UTA, and of the administration of UTA business affairs. The ED supervises executive staff of chief department officers. Included in these officers, the chief operations officer is responsible for bus and rail transit operations in accordance with the direction, goals, and policies of the board of trustees. The Safety and Security Director has responsibility for corporate safety. The safety department reports quarterly to the ED and executive staff during meetings of the General Managers Safety and Security Committee (GMSSC).

1.3.2 Management – Key Role in Safety

UTA's safety program is incorporated into every aspect of transit service by rail and bus service managers. Safe operations of bus and rail units are the responsibility of the regional general manager (RGM). Each operating division has an appointed RGM, who along with managers and supervisors are responsible for implementing policies and procedures for safe operations. The regional general managers have the ultimate responsibility and oversight for the hazard process within their business units, they have charged their management teams to effectively manage safety, and to develop safety programs, plans, procedures, training, policies, and rules to govern safety; and to fully comply with the TASP. Bus and rail maintenance facilities are staffed with a manager of maintenance responsible for the safe operation of the facility and are supported by shift supervisors and maintenance workers during their performing maintenance, servicing, and inspection.

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

UTA safety compliance is managed at the lowest levels. Each employee is trained in safety, job duties, and given responsibility for their own safety and the safety with whom he/she works. All employees have the authority to halt an operation if it is deemed to be unsafe. UTA's system safety processes emphasize open and fair dialog between leaders and subordinates to increase the commitment to safety at all levels.

In an oversight role, Safety Administrators report to the Safety and Security Director. Safety Administrators have a role in executing the functions necessary to ensure safety, to include the following:

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

The Safety Department will conduct regularly scheduled internal safety audits to evaluate compliance and conformance with UTA's TASP, UDOT-SSO Program Standards; and 49 CFR 673. Safety Administrators serve as alternates to each other. Safety Administrators work closely with management and employees, through various processes and committees, and have authority to determine compliance. When warranted, Safety Administrators may issue corrective action plans (CAP), non-conformance reports (NCR), corrective action requests (CAR), and preventive action requests (PAR) as part of the Environmental, Quality and Safety programs. UTA is certified under Safety Management System (SMS). Safety Administrators are the designated contacts to regulatory agencies and serve as alternate contacts to the UDOT-SSO oversight agency, Transportation Safety Administration (TSA), and Division of Homeland Security (DHS).

1.3.3 Management – Transit Agency Safety Plan (TASP)

UTA's Executive Director, having authorized and endorsed the program and resulting plans, processes, and procedures, has delegated the responsibility to update and implement UTA's Transit Agency Safety Plan (TASP) to the Safety and Security Director. The Safety Department is responsible to oversee the writing and development of the TASP, and to conduct annual updates and revisions, and to disseminate the TASP document in accordance with UDOT SSO Program Standards, and 49 CFR 673, General Requirements.

The TASP is reviewed with and distributed to the ED, chief officers, and regional general managers who comprise the General Manager's Safety and Security Committee. The TASP is also distributed to members of the other safety committees (see chapter 5) and reviewed with new employees. In addition to the above distribution list the TASP is distributed to all employees of the Authority via email. The TASP is also made available to all UTA employees on the company intranet “http://sharepoint/Pages/default.aspx” or “http://utanet/Pages/default.aspx”. UTA employees will be notified via company email of the newly updated TASP on an annual basis. Old versions of the TASP will be removed and replaced with latest approved TASP as they are made available. This process will be initiated and supervised under the direction of the Safety Manager.

The S: Drive on UTA’s network is used for the purpose of storing and tracking past and current safety sensitive information and documents; including the TASP, incident and accident reports, corrective action plans, hazard logs, inspections, audits etc. The S: drive is a secured drive and only accessible to safety department, designated personnel and the UDOT SSO Manager. Current Data and reports are maintained and kept by the safety department and can be reviewed by the UDOT SSO Manager at any time.

1.3.4 Light Rail Service

UTA's TRAX light rail and S-Line streetcar services are managed by the General Manager of Light Rail. TRAX service began operations December 4, 1999, and serves Salt Lake County, with an annual ridership of 19,500,000 passengers. TRAX operates 48 stations over 44 miles of track that started with the North-South line, from Sandy to the Salt Lake City. TRAX service includes the Red Line which extends from Daybreak to the University of Utah Medical Center. The Green Line starts at the West Valley City Hall and runs to the Salt Lake City International Airport. The Blue line runs from Draper City in the south (12300 South) to the Salt Lake Central Station at 500 West 300 South. The S-Line Streetcar line runs from the TRAX Central Point Station at 2250 South to Fairmont Station at McClelland St. (Approximately 11th East).

Rail maintenance facilities for light rail vehicles are located at Midvale (613 West 6960 South) and Jordan River (2264 South 900 West). Portions of TRAX are under the Federal Railroad Administration's (FRA) regulation. These segments are from 1250 South to 6100 South on the North-South line and from 6400 South to 5600 West on the Mid-Jordan line. Passenger TRAX operations are temporally separated from freight operations. TRAX operates from approximately 5:00 a.m. to midnight Monday thru Sunday Freight operators utilize track on the Mid-Jordan Joint Trackage from 11:45 p.m. to 4:45 a.m. The Main Line Joint Trackage is utilized from 12:00 a.m.to 5:00 a.m., Freight movements require authorization from the TRAX Control, which operates continually.

UTA's current TRAX vehicle fleet consists of the following LRVs:

Type	Count
Siemens SD-100/160 Series	40
Siemens S70 Series	77 (3 in service as streetcars)

UTA's train control, including automatic block system (ABS), intersects established grade crossings which are protected by gates, flashing lights, and audible signals. Intersections within the street-running portion of the downtown/university/West Valley corridors are controlled with traffic signals and additional train operating signals.

The Director of Maintenance Support is supported by managers, supervisors, and maintenance of way (MOW) employees, servicing light rail and commuter rail systems, overhead catenary systems (OCS), power stations, infrastructure, and rail facilities. The Maintenance of Way department has responsibilities including light rail and commuter rail. Bus stops and rail stations and platforms, park-and-ride lots, and passenger services facilities are managed by the facilities maintenance manager.

1.3.5 Commuter Rail Service

UTA's Frontrunner commuter rail services are managed by the General Manager of Commuter Rail. FrontRunner is UTA's regional commuter rail service. FrontRunner began revenue operations on April 26, 2008 and expanded services on December 11, 2013. It serves Utah, Salt Lake, Davis, and Weber Counties, with an annual ridership of over 5.19 million passengers. FrontRunner services 15 stations on 82 miles of track, extending from Ogden to Provo.

FrontRunner is regulated by the Federal Railroad Administration and is subject to FRA rules, regulations, and inspections. Hours of operation are, generally, weekdays 4:00 a.m. to 12:30 a.m. and Saturdays from 6:30 a.m. to 12:30 a.m., with no Sunday service.

There are daily freight industry operations that that utilize FrontRunner mainline crossover switches. Freight movements require authorization from the FrontRunner Control Center. All mainline switches are powered and can be operated by personnel in the control room. There are 82 miles of exclusive track which include a total of 62 at-grade crossings. FrontRunner trains utilize cab signals and positive train control. The mainline is single track with station platform passing sidings. The trains are in a 'push-pull' configuration with diesel-electric locomotives on the north end of the consist and cab cars on the south end.

The senior executive at FrontRunner is the commuter rail general manager. The manager of rail operations oversees controllers, supervisors, train operators, and train hosts. Vehicle maintenance, maintenance training, technical services, body repair, fabrication, component rebuild and vehicle overhaul. is managed by the manager of commuter rail vehicle maintenance and one assistant manager. They are supported by supervisors and commuter rail technicians, performing maintenance, servicing, and inspection on the passenger cars and locomotives. All rolling stock maintenance is performed at the Warm Springs Rail Service Center located in Salt Lake City, Utah.

UTA's FrontRunner fleet consists of the following rolling stock:

Type	Count
MP-36 Locomotives	18
Bombardier Cab Cars	22
Bombardier Coach Cars	16

1.3.6 Bus Service

UTA bus operations are managed by regional general managers (RGM) in service units with geographical boundaries including Salt Lake (Salt Lake County includes Central and Meadowbrook facilities); Mt. Ogden (Weber, Davis, and Southern Box Elder counties), and Timpanogos (Utah County). Special Services provides paratransit route deviation, rideshare, and vanpool services throughout the UTA service area. Paratransit services in Weber, Tooele, and Utah counties are provided by contractors.

Bus maintenance facilities are located in Ogden, Central and Meadowbrook (Salt Lake), and Timpanogos (Utah County). Special Services maintenance is located at Riverside (adjacent to Meadowbrook).

UTA Bus service includes more than 610 buses. The fleet includes, electric buses, hybrid-electric buses, ski buses, over-the-road coaches, and more than 100 paratransit vehicles. UTA Central division has 47 compressed natural gas (CNG) buses and 3 zero emissions battery-electric buses.

UTA runs two express bus lines in Utah County and Salt Lake County that offers park-and-ride lots, ticket-vending machines, upgraded stations, limited stops, faster speeds, greater frequency, signal priority, dedicated bus lanes and specialized buses. The Utah Valley Express (UVX) opened in December 2018 with 5 miles of dedicated bus lanes servicing 18 dedicated stops along its 10.5-mile route from the Orem and Provo Frontrunner station through downtown Provo, BYU campus, UVU campus and down University Parkway in Orem. The UVX

bus fleet includes 25 sixty-foot articulated New Flyer Xcelsior electric hybrid buses that can hold up to 80-passengers with ground-level boarding for ADA passengers.

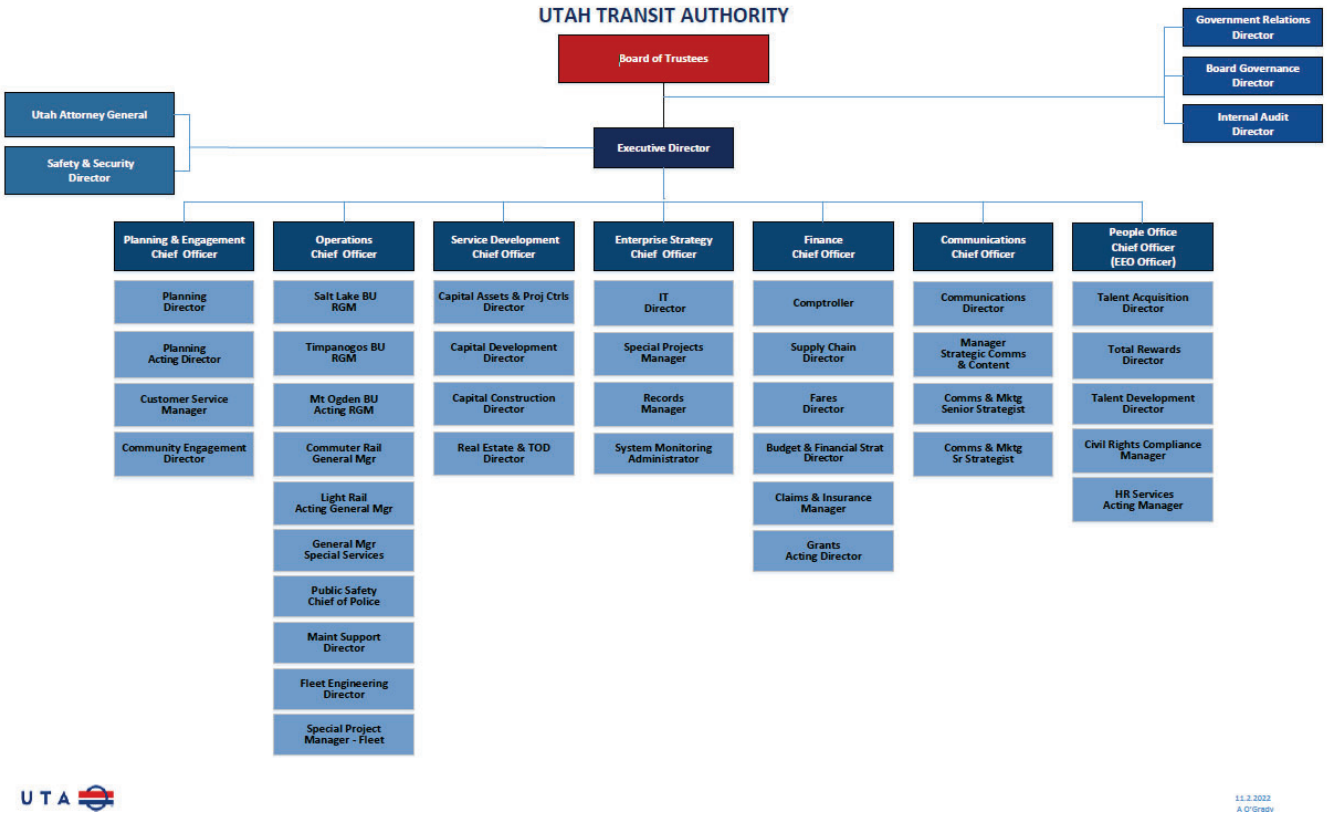
1.3.7 CLIMATE AND GEOGRAPHY

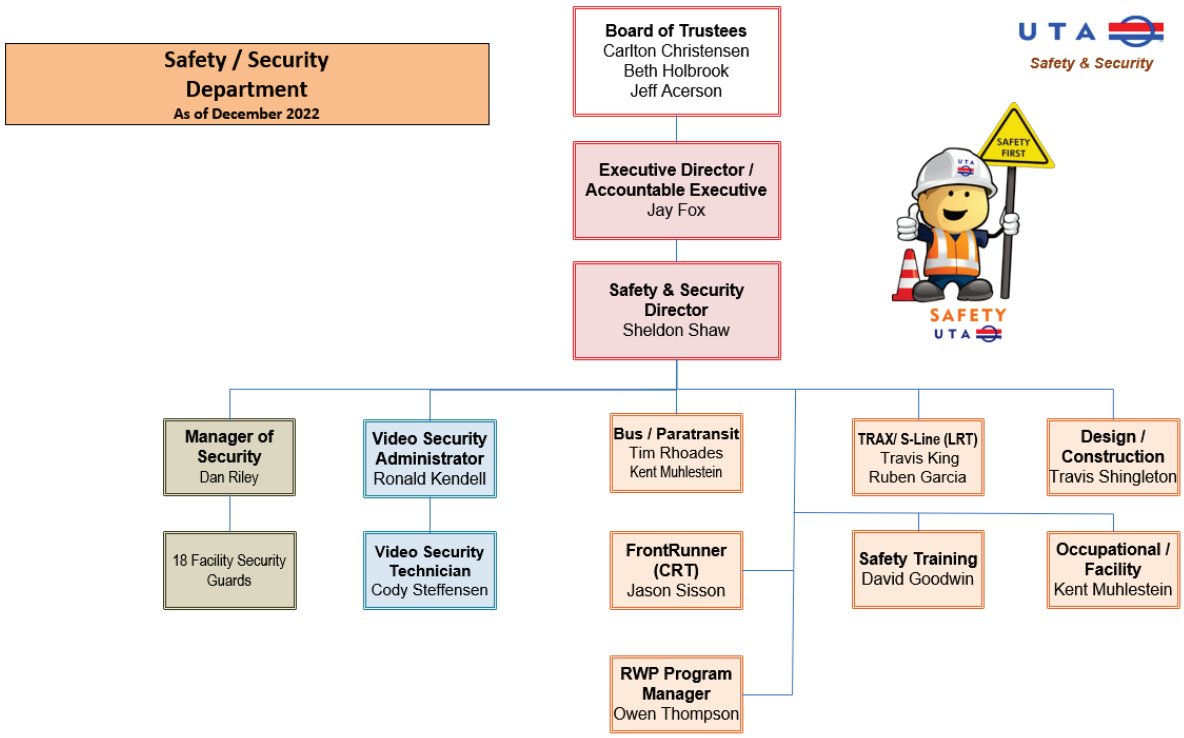
Salt Lake City normally has a semi-arid continental climate with four well-defined seasons. Summers are characterized by hot, dry weather, but the high temperatures are usually not oppressive since the relative humidity is generally low and the nights usually cool. July is the hottest month with temperatures reading 90–100 degrees F. Winters are cold, but usually not severe. The average annual snowfall is less than 60 inches at the Salt Lake City Airport, but much higher amounts fall in higher bench locations. Heavy fog can develop under temperature inversions in the winter and may persist for several weeks. Precipitation is generally light during the summer and early fall but may be heavy in the spring when storms from the Pacific Ocean are moving through the area more frequently than at any other season of the year.

The UTA transit services extend throughout the Wasatch Front area approximately 60 miles wide (E-W) between Park City, Salt Lake City, and Tooele Co. The area also ranges from Box Elder County on the north to Payson City, Utah County in the south, extending nearly 100 miles. Service areas include high mountain valleys situated along the western slope of the Wasatch Mountains. Elevations range from approximately 4,250 feet above sea level to greater than 5,300 feet above sea level on the benches overlooking the valleys. Service to the area ski resorts rises to over 8,000 feet above sea level. The Wasatch Fault runs the length of the UTA service area from north to south roughly tracing a line along the base of the Wasatch Mountains. Fault scarps are easily observed at various locations along the fault.

1.3.8 Utah Transit Authority Organizational Chart

UTA's organizational chart, illustrates the management structure of the organization. The Safety and Security organizational chart focuses on the roles of Safety Department managers and Safety Administrators, showing the process available to report directly to UTA's ED.





1.4 TASP Annual Updates, Revisions, and Changes

1.4.1 Written Plans

The Transit Agency Safety Plan (TASP), System Security Plan (SSP) and the Emergency Preparedness Plan (EPP) will be reviewed and updated annually, on or before January 1st, and submitted to UDOT SSO for approval and acceptance in accordance with UDOT's Rail Transit State Safety Oversight Program Procedures and Standards. The plans may also be revised when and as required by the General Managers Safety Security Committee. Each yearly revision of the TASP will be approved by the joint labor-management safety committee.

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

Emergency management plans have been developed for UTA and are part of the UTA Emergency Preparedness Plan (EPP). Each mode within UTA develops their specific emergency response plans.

TRAX Emergency Response Plan and FrontRunner Emergency Preparedness Plan. These plans describe activities and responsibilities for Rail Service personnel and are the responsibility of the rail Safety Administrator. The Rail Services Emergency Preparedness Plan must meet the requirements of 49 CFR Part 239 and is reviewed annually and updated as needed.

The UTA System Security Plan (SSP) details the security program for UTA and includes the TRAX light rail and the FrontRunner commuter rail line. This plan describes the system security and the threat and vulnerability management process employed by UTA Transit Police organization. This plan details how state and local law enforcement agencies and UTA Transit Police work together to provide for a secure system. Involvement of UTA security managers and local law enforcement personnel is essential for a strong cooperative security effort.

The UTA FrontRunner Commuter Rail System Safety Plan (FRSSP) was developed in accordance with 49 CFR Part 270 FRA rules for system safety plans. This document aligns with the TASP elements and is a stand-alone plan governing system safety specifically at FrontRunner commuter rail.

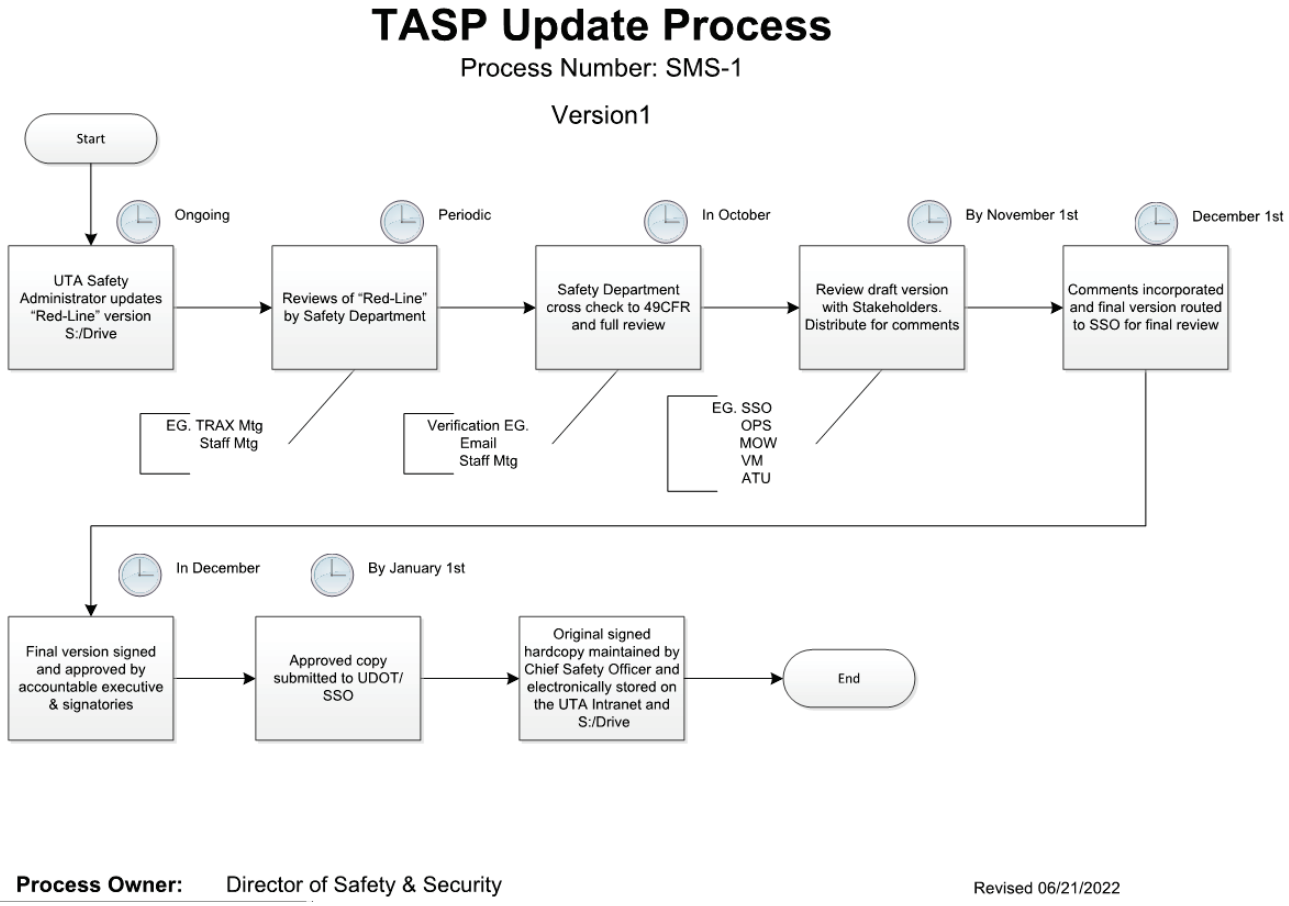
UTA's Director of Safety and Security is accountable to senior management for the accuracy and timeliness of all TASP, SSP, FRSSP and EPP updates approvals and distribution to include FRA, UDOT, SSO manager, and managers and supervisors at the Rail Service Center. UTA's Safety Department will coordinate with UDOT-SSO to develop, review, update and distribute the plans. UTA's safety department is responsible to evaluate compliance and or deficiencies with UTA's safety emergency preparedness programs, UDOT-SSO program, 49 CFR 673 general requirements, and FRA regulations, initiatives, and programs, as applicable.

The TASP, EPP, and FRSSP are controlled documents that are applicable to all UTA employees and contractors. Copies are distributed to members of the GMSSC, UTA managers, and Safety Committee members and are sent to all UTA employees via email. The current TASP is also available on the intranet and is updated as new versions are made available. (Note: The SSP is not distributed as it is a security sensitive document. It may be reviewed after an approved written request is made).

Per CFR 673.31, UTA maintains all documents set forth in the TASP, including those related to the implementation of its SMS, and results from SMS processes and activities. UTA maintains documents that are

included in whole, or by reference, that describe the programs, polices, and procedures that the agency uses to carry out in the TASP. UTA maintains these documents for a minimum of three years after they are created.

1.4.2 TASP Annual Update Process Flow Chart



1.4.3 Emergency Management Team Meetings

Emergency management matters are addressed within business unit safety meetings. Emergency Management training is further explained in the EPP.

Meetings with external agencies are coordinated for training, information, exercising, and to provide familiarization training for local first responders. Emergency response organizations are informed of the rail system and important fire/life safety features. Exercises, types, reports, and schedule is also explained within the EPP.

II RISK MANAGEMENT

This section describes how UTA identifies, evaluates, tracks, and mitigates hazards and risk in the organization and on the transit system. The processes undertaken by the authority are provided in sufficient detail to be effectively undertaken. Acceptable risk levels, performance targets and mitigation measures are established.

2.1 RISK MANAGEMENT PROGRAM

2.1.1 HAZARD MANAGEMENT

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

The Hazard Management Program applies to all UTA employees and obligates everyone to constantly observe hazards in their work areas and report them through the hazard management process. The overall hazard management program incorporates a system-wide hazard identification process, including activities for:

a. Identification
b. Investigation
c. Evaluation and analysis
d. Mitigate or elimination
e. Tracking
f. Ongoing reporting to UDOT SSO and UTA corporate staff relating to hazard management activities and status

2.1.1.1 Local Hazard Management

UTA RGMs and department managers play a key role in hazard management and are responsible to ensure that the following processes are fully integrated within their departments:

a. All new employees receive hazard management training and understand hazard management expectations
b. Ensure a safe environment free of retaliation for employees to report hazards to management
c. Ensure hazards are placed on a local hazard log for tracking and documentation
d. Represent management or select designee to represent management on a local safety committee
e. Ensure each hazard has been assigned to a specific individual/POC
f. Management or management's designee will work with bargaining unit representative to establish the hazard rating, a safety representative will participate as arbiter and have final approval of rating

2.1.1.2 Corporate Hazard Management

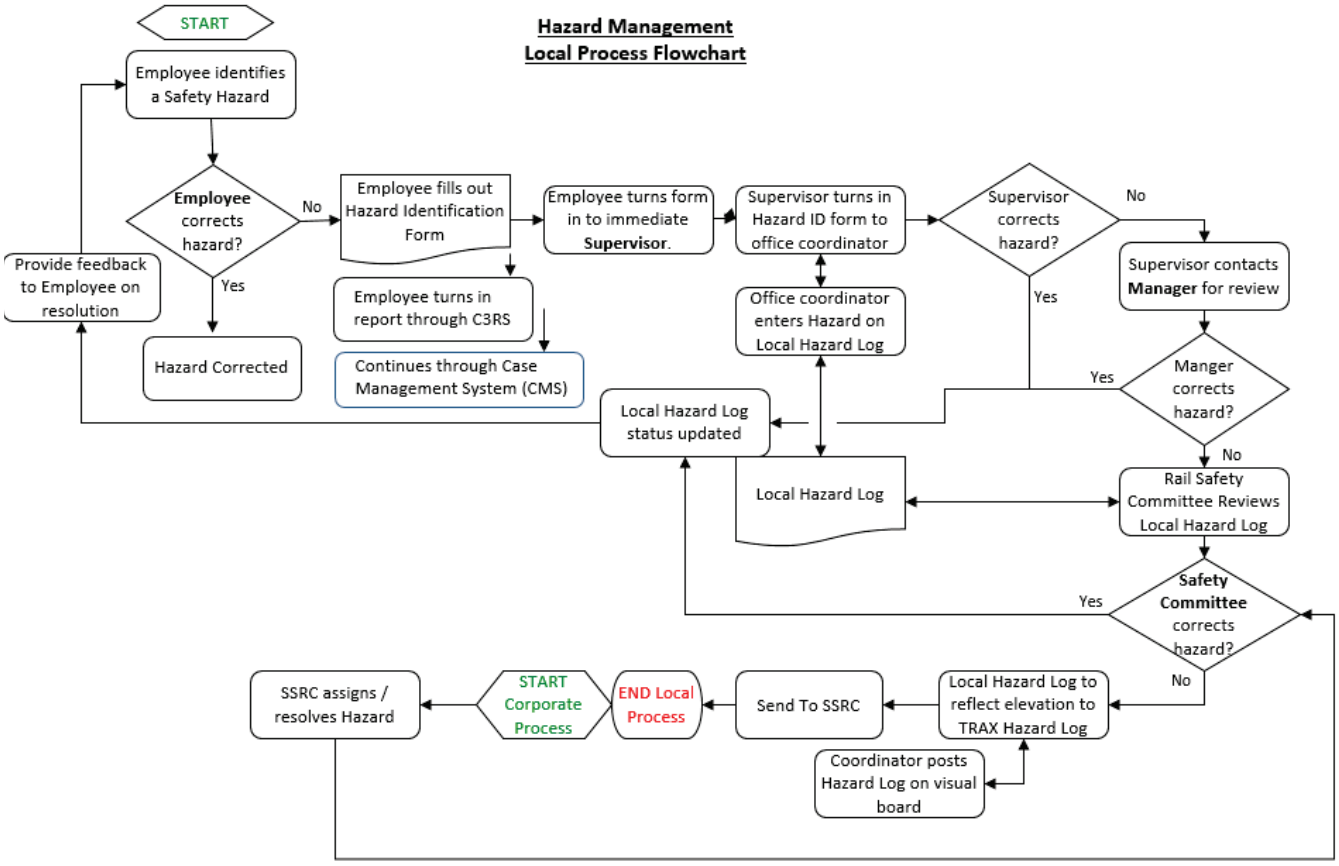
When a hazard is identified as needing mitigation with costs or changes beyond the abilities of the local safety committee or department, the hazard will be elevated to the corresponding Safety Department Hazard Logs and be reviewed by the Safety and Security Review Committee (SSRC). The SSRC committee members include key department managers that have the ability to make informed decisions based on the multiple disciplines at UTA and has access to higher level budgeted solutions.

2.1.2 Hazard Process Overview

UTA's hazard management processes include all transit modes. The following lays out an overall description of how hazards are identified, evaluated, analyzed, controlled, or eliminated, tracked, and reported to UTA senior management and UDOT State Safety Oversight.

a. The Safety Administrators assigned to each transit mode are the primary points of contact (POC) for the hazard management process.
b. Safety Committee members identify, evaluate, and analyze hazards in their area.
c. The Safety Administrator will enter identified hazards into the safety department hazard log for that mode (bus, TRAX or CR-rail).
d. The Safety Administrator and or committee develops a Corrective Action Plan (CAP) for each undesirable SERIOUS hazard over 180-days and for each unacceptable HIGH hazard and identify point of contact or owner of the hazard and places this information on the safety department hazard log for tracking purposes.
e. CAP's may also be identified as a result of accident investigation. (See Corrective Action 3.2.4)
f. Safety committee members also participate in the evaluation and control or elimination of the hazard.
g. Hazards must be mitigated at the lowest level possible. However, when a hazard is identified as having a mitigation that involves multiple departments or requires cost or changes beyond the safety committee or department abilities or budgets the hazard will be elevated to the Safety and Security Review Committee (SSRC). The SSRC represents key department managers and has the capability to employ multiple disciplines at UTA and has access to higher level budgeted solutions.
h. Recommendations/Results from Contractor or Internal audit, testing, industrial or environmental sampling results requiring corrective actions will be placed in the safety department hazard log for follow up and possible need for retesting for compliance with Safety or environmental requirements.
i. If mitigation or control of a hazard is not achieved through the SSRC, the hazard mitigation process may be elevated to the General Manager's Safety and Security Committee (GMSSC) for final resolution.

Hazards identified by an employee to his/her supervisor may be resolved by the employee and supervisor. If the supervisor is unable to solve the identified hazard, he/she will forward the hazard to a safety committee representative to be brought to the safety committee for resolution. The safety committee and safety administrator will review the hazard and assign an initial hazard rating (IHR) and place the hazard on the appropriate hazard log to be tracked. The following flow process is followed by employees in identifying and correcting hazards at the employee/supervisor level and actions taken to move the hazard to the safety committee and beyond if necessary.



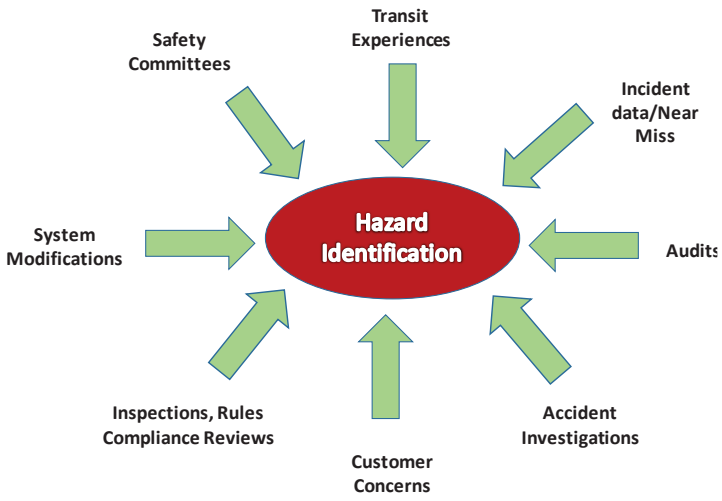
2.1.3 HAZARD IDENTIFICATION

Identification of hazards is the responsibility of all UTA employees and contractors. The continuous identification, monitoring, and elimination of hazards is key to an effective system safety program.

Hazard identification methods include, but are not limited to the following:

a. Observation, inspection, and interaction of all UTA employees and contractors.
b. Reports from safety committee members, passengers, customer service, and field personnel.
c. Evaluation of accidents, incidents, near misses, to include data trends and projections.
d. Preliminary Hazard Analysis (PHA) of a design or new construction.
e. Safety certification, system integration testing, pre-revenue testing, system modification, configuration management verification, and inspection processes.
f. Operation Hazard Analysis (OHA) of revenue operations.
g. Internal and external safety audits, inspections, observations, defects, findings, observations, violations, and reviews.
h. Controller logs, daily operating clearances/bulletins, and training feedback
i. "Lesson learned" inputs.
j. Review of applicable regulatory codes and standards.
k. NTSB, FRA, FTA, SSO, OSHA, safety recommendations, guidance, initiatives, and alerts.

l. Nonconformance Reports, Corrective Action Reports, and Preventive Action Reports (NCR, CARS, and PARS) that may arise from external or UTA internal audits.



Potential Sources of Hazard Identification

2.1.3.1 Hazard Reporting

Acceptable means of reporting safety conditions include:

a. Complete a Safety Suggestion / Hazard Report form and deposit:
    a. In a safety suggestion collection box.
    b. With your manager or supervisor who will deliver to the local safety administrator.
    c. With the local Safety Administrator inbox or in person.
b. Via email or verbal notification to your supervisor, manager, local safety administrator, or other safety representative.
c. Utilizing UTA's Confidential Close-Call Reporting System (C3RS) hotline or electronic submission.
d. Through standard radio communication or other Standard Operating Procedures for observations, tests, and accident or incident reporting.

2.1.3.2 Confidential Close-Call Reporting System (C3RS)

To ensure that safety concerns are reported freely and without prejudice, UTA has established a process through which employees and contractors can report safety conditions, unsafe acts or practices, and / or close-call incidents anonymously so that it is without fear of discipline, reprisal, or penalty. These could include:

a. Unsafe working conditions
b. Close calls
c. Unsafe events
d. Hazards
e. Policies and procedures that are not working as intended

The C3RS is available with English (833-940-2874) or Spanish services (800-216-1288), or via an online form at the following address: http://www.lighthouse-services.com/rideuta-hazard or by email at reports@lighthouse-services.com.

Comments submitted through the C3RS will be managed and assigned through the Case Management System (CMS) to a local safety administrator. The hazard will then enter the hazard management process, with follow-up and outcome notes recorded in the CMS.

2.1.4 Hazard Investigation, Evaluation, and Analysis

Reported hazards will be assessed by the reporting employee and supervisor. If a resolution cannot be found, the department manager in coordination with employee and supervisor will work towards resolution. If a resolution cannot be determined, the Safety Administrator and or safety committee will determine if a safety hazard exists and assign an initial hazard rating (IHR) to determine if an investigation, evaluation, or analysis needs to begin.

2.1.4.1 Root Cause Analysis and accident evaluation

Hazards are investigated through evaluating accidents, incidents, and close calls. Hazards originating from accidents are reviewed by the Safety Administrator and accident evaluation groups as necessary. As part of evaluating accidents and incidents, root cause analysis is used to help focus on the bottom-line fundamental cause and determine the most effective solutions to mitigating hazards. An accident evaluation group (AEG) will assist in finding the cause of the accident and any factors that may have contributed to an accident. A third-party expert may be used to assist with an investigation if it is deemed necessary.

2.1.4.2 Hazard Reporting Threshold to UDOT

UTA will notify UDOT SSO of all hazardous conditions that affect the immediate safety or security of the light rail system. At a minimum, UTA will notify UDOT SSO within one business day of hazardous conditions that are rated as unacceptable (HIGH) using UTA's 21 box hazard rating matrix.

To ensure UDOT is also appropriately notified of all other hazardous conditions, accidents, incidents, and occurrences, and serious occurrences that are not rated as HIGH, UTA will also include any safety hazard discoveries that don't meet the criteria listed in section 3.2.1.2 in its safety department hazard log and hazard management process. This safety department hazard log is provided to UDOT SSO on a monthly basis.

2.1.4.3 UTA Hazard Analysis Matrix

UTA's hazard analysis matrix shown below, provides the ability to assign hazards a specific hazard rating based on a combination of severity and probability. Hazards may be rated as HIGH, SERIOUS, MEDIUM, LOW, and ELIMINATED.

SEVERITY					
Severity Level		Injury or Occupational Illness	Other than Injury		
			Property Damage (PD)	System disruption (SD)	Evacuation
1	Catastrophic	Death (does not include suicides, or death by natural causes)	> $ 250,000;	> 24 hrs	Fire / Life Evacuation
2	Critical	Fracture, Severe Bleeding, Paralysis, Brain injury, Dismemberment	$250,000 – $100,000	12 - 24 hrs	
3	Marginal	Bruising, Abrasions, Bleeding, Sprains/Strains (Ambulance transport)	$100,000 – $25,000	4 – 12 hrs	
4	Negligible	Bruising, Abrasions, Sprains/Strains (No Ambulance transport)	< $25,000;	< 4 hrs	

Hazard severity is a subjective measure of the worst credible mishap resulting from personnel error, environmental conditions, design inadequacies and/or procedural efficiencies for system, subsystem or component failure or malfunction. Hazard severity is ranked as shown above.

PROBABILITY					
Probability Level		Likelihood of event in life of an Specific item	MTBE*in Operating Hours (oh)	Occurrence within Fleet or Inventory	MTBE in days
A	Frequent	Will occur frequently	< 1,000 OH	Continuously Experienced	1 per month
B	Probable	Will occur several times	1,000 – 100,000 oh	Will occur frequently	1 per year
C	Occasional	Likely to occur sometimes	100,000 – 1,000,000 oh	Will occur several times	1 per 2 years
D	Remote	Unlikely but possible to occur	1,000,000 - 100,000,000	Unlikely, but can be expected to occur	1 per 5 years
E	Improbable	So unlikely, assumed occurrence may not be experienced.	> 100,000,000 oh	Unlikely to occur, but possible	1 per 10 years
F	Eliminate	Actions taken to remove the hazard / conflict	Never	Will not occur	N/A

***Mean Time Between Events** The likelihood that hazards will be experienced during the planned life expectancy of the system can be estimated in potential occurrences per unit of time, events, population, items, or activity. The probability may be derived from research, analysis, and evaluation of historical safety data.

UTA Risk Assessment Matrix		SEVERITY			
		1. Catastrophic	2. Critical	3. Marginal	4. Negligible
PROBABILITY	A. Frequent	High	High	Serious	Medium
	B. Probable	High	High	Serious	Medium
	C. Occasional	High	Serious	Medium	Low
	D. Remote	Serious	Medium	Medium	Low
	E. Improbable	Medium	Medium	Medium	Low
	F. Eliminated	Eliminated			

Resolution Requirements		
High *	Unacceptable	correction required
Serious	Undesirable	correction may be required, decision by management
Medium	Acceptable w/ review	with review and documentation by management
Low	Acceptable	without review
Eliminated	Acceptable	no action needed

2.1.4.4 Hazard Severity

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

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

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

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

Category 4 Negligible - Operating conditions are such that human error, subsystem or component failure or procedural deficiencies will result in less than minor injury, occupational illness or system damage.

The categorization of hazards is consistent with risk-based criteria for severity; it reflects the principle that not all hazards pose an equal amount of risk to personal safety.

2.1.4.5 Hazard Probability

The probability of a particular event or a specific hazard occurring may be defined as a non-dimensional ratio of the number of times that a specific event occurs to the total number of trials in which this event will occur during the planned life expectancy of a system. Generally, hazard probability is described qualitatively in potential occurrences per units of time, miles, trips/runs or passengers carried. A hazard probability may be derived from the analysis of transit system operating experience, evaluation of UTA safety data, the analysis of reliability and failure data, or from historical safety data from other passenger rail systems or bus systems (see UTA Hazard Analysis Matrix 2.1.4.3).

2.1.4.6 Hazard Ratings

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

The Hazard Matrix (see UTA Hazard Analysis Matrix 2.1.4.3) identifies the hazard risk index (HRI) based upon hazard severity category and probability and the criteria for defining further actions based upon the index.

HIGH risk hazards that receive an unacceptable initial hazard analysis made by management, safety committee or the Safety Administrator Safety Administrator receive immediate attention/control. A high hazard rating requires corrective action. Hazards that receive a high hazard rating will be elevated from the local hazard log to the appropriate Safety Department hazard log.

SERIOUS hazards that are undesirable may require corrective action and decisions by management. Hazards that receive a serious hazard rating will remain on the local hazard logs no more than 180 days before being moved to the appropriate Safety Department Log.

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

LOW hazards do not require review and are acceptable.

ELIMINATED hazard is no longer present.

2.1.5 Hazard Control, Resolution and Elimination

Safety critical hazards assigned an initial hazard ration of SERIOUS or HIGH using the above risk assessment matrix must be controlled or eliminated so that the hazard does not continue to pose a danger. This may be done in a temporary manner as long as the hazard is controlled until a long-term fix has been implemented. Hazards assigned a hazard rating of MEDIUM or LOW will be controlled to the lowest extent practicable. The process of controlling, tracking, and elimination, of hazards is recorded on hazard logs.

All undesirable SERIOUS hazard log entries over 180-days and all unacceptable HIGH hazard log entries will require the development of a corrective action plan (CAP).

Corrective action plans include the following information:

a. Element of activity identified as deficient
b. Planned activities to resolve deficiency
c. UTA department responsible for implementing corrective action
d. Scheduled completion date for implementation
e. Estimated cost of implementation

Hazard log entries with their associated corrective action plan are reviewed regularly by the safety department, safety committees, UDOT SSO and periodically reviewed by executive management. CAP's may be tracked and sorted from the hazard log. When a CAP is closed the hazard log will reflect this action and a closed date. Individual CAP files are stored in the Safety Department file server by hazard tracking number under the hazard management folder.

2.1.5.1 Hazard Resolution and Elimination

Hazard resolution is defined as the analysis and subsequent actions taken to reduce the hazard to the lowest level practical and the risk associated with an identified hazard. Hazard resolution is not synonymous with

hazard elimination. In a transit environment, there are some hazards, which are impossible to eliminate and others, which are highly impractical to eliminate. Reduction of risk to the lowest practical level can be accomplished in a variety of ways from protective and warning devices to special procedures.

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

2.1.6 HAZARD TRACKING

2.1.6.1 Local Hazard Logs

Local Hazard Logs are kept by each division within UTA to track submitted hazards and are maintained by the corresponding safety committee. Department managers ensure local hazard logs are used to track hazards at the departmental level within UTA. These logs are maintained within the department and are reviewed by the local safety committee on a monthly basis. Local logs must include both open and closed hazards and be posted on department and/or service unit safety boards.

Hazards placed on the local log receive their initial and final hazard rating using UTA's 21 box hazard rating matrix. Reporting employees, with the assistance of their manager or supervisor, will give hazards their initial rating and final ratings (see UTA Hazard Analysis Matrix). The rail safety committee can assist in this process if needed. Hazard ratings should be changed when new information is received, or as a result of data analysis. If the hazard rating is changed by new information or data analysis, then the manager or designee will be notified.

2.1.6.2 Safety Department Hazard Logs

The Safety Department Hazard Log is kept is used to track Corrective action plans, and serious/high hazards from the local hazard log. Safety Administrators are responsible for the maintenance of Safety Department Hazard Logs. The Safety Department Log will be kept digitally and be directly accessible to all Safety Administrators. Logs must include both open and closed hazards for the current reporting year.

Hazard rating can be assigned by the either the Safety Administrator or the SSRC. The following are specific hazards that are identified and mitigated at the corporate level:

a. Unacceptable hazards (HIGH Hazards)
b. Hazards identified from audits from outside agency's (UDOT SSO, FTA, FRA, OSHA)
c. Hazards identified from accident investigations
d. Hazards where corrective action will cost more than $25,000
e. Undesirable SERIOUS hazards on local department hazard logs over 180 days
f. When deemed necessary by the Safety Department

2.1.6.3 Corrective Action Plan (CAP)

Corrective action plans are utilized within UTA for hazards that meet certain criteria. The hazards identified in the section above require the usage of a corrective action plan (CAP). CAPs are tracked on the safety department hazard logs with electronic copies directly accessible to all Safety Administrators at all times.

For hazards that receive a MEDIUM or LOW hazard rating, the use of a corrective action plan is optional depending on the complexity and ability to correct the identified hazard, e.g. clearing shrubs or trimming branches of a tree. UTA will coordinate with the UDOT SSO to determine if a CAP is necessary for medium or low hazards.

In the following instances light rail corrective action plans must receive prior approval by the UDOT SSO Manager before corrective action plans may be carried out:

a. Unacceptable hazards (High Hazards)
b. Audit findings from regulatory agencies resulting in Non-conformance (UDOT, FTA, FRA, OSHA)
c. Accident investigations requiring corrective action
d. Testing or audits of Industrial Hygiene which potentially exceed OSHA PEL limits

2.1.6.4 Corrective Action Plan Development

Department managers or their designee will work in conjunction with the Safety Department and associated safety committees (Local Safety Committee, SSRC, and GMSSC) to develop a corrective action plan and fill out a CAP form for the identified hazard. Accident Evaluation Groups are also utilized when developing CAP's resulting from hazards identified after an accident. Safety Administrators ensure that the CAP process is followed and properly tracked until it is closed.

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

a. A specific deficiency / finding / hazard with an initial hazard rating
b. Assigned Date
c. Process, or plan to address and resolve the deficiency / finding / hazard
d. Proposed Implementation date
e. Responsible department, and person
f. Source
g. CAP ID
h. SSO Program Manager initial approval and date
i. Resolution of CAP
j. Accountable Owner Signature with completion date
k. SSO Program Manager Verification (if applicable)

2.1.6.5 Ongoing Reporting to State Safety Oversight Agency

Each CAP developed for Serious or High hazards, from investigations, audit findings or other deficiencies will be submitted to UDOT SSO as required for initial review and approval within 30-days of identifying a deficiency. The CAP form will be assigned a specific identification tracking number and placed on the safety department hazard log with its corresponding hazard for tracking purposes. A digital CAP form is maintained in the Safety Department file server for UDOT SSO access.

The Safety Administrator will monitor the current status of CAPs using the safety department hazard log and identify any issues with the resolution action and dates. Updates will be recorded on the safety department hazard log and provided to the UDOT SSO at least monthly.

Upon completion of the corrective action the safety department will submit the CAP to UDOT SSO for adoption. UDOT will notify UTA in writing of its acceptance or rejection of the corrective action plan and in accordance with procedures specified in the UDOT SSO standard. The completed CAP is formally adopted by receiving UDOT SSO's signature on the CAP form. The UTA CAP form requires the UDOT SSO to sign and date the CAP indicating the assigned resolution and completion of the CAP.

After a hazard has been resolved, it will be assigned its final hazard rating. The Hazard Log will then be updated to show the status of the identified hazard with its CAP to "CLOSED". The completed electronic CAP form will be maintained in the safety department file server.

2.1.7 Job Safety Briefing

Prior to beginning work, employees that perform high risk, or non-routine job tasks are required to identify hazards, and discuss controls associated with that task during job safety briefings. The job briefing should include type of work, number of involved employees, additional hazard controls, emergency communication, required PPE, review of necessary training and applicable SOPs, and any additional items deemed necessary by the supervisor overseeing the work. Identified hazards that cannot be controlled with PPE or procedures must be resolved or mitigated through the hazard management process. At any time if the conditions of work change, a follow up job briefing is required.

2.2 HAZARDOUS MATERIALS PROGRAM

2.2.1 MANAGEMENT OF HAZARDOUS MATERIALS

For any hazardous chemical used or stored in the workplace, UTA must maintain a safety data sheet (SDS) and train employees on the chemical hazards as outlined in 29 CFR 1200 (Right to Know). An SDS is a chemical safety instruction sheet that informs employees of specific safety or health hazards of chemicals in the workplace, & gives directions to employees for Protective Equipment (PPE) i.e. goggles, gloves, respirator, safety glasses, etc.

All safety data sheets are accessible through an Intranet-based system http://otis.osmanager4.com/uta/rtk/uta. A quick link to this web site is available through the UTA SharePoint Site and on every UTA desktop home screen. Section ASSURANCE (PROCURMENT) 3.11 describes the new chemical review workflow and approval process.

The UTA Environmental Department submits an annual Tier II inventory of hazardous chemicals to the state emergency response commission (SERC), local emergency planning committee (LEPC), and local fire department. Tier II reporting requirements are limited by chemical quantity to any UTA facilities that are subject to reporting.

The common hazardous materials transported to or from and used by UTA that are subject to reporting as described in 49 CFR are:

a. Diesel Fuel
b. Gasoline
c. New and used oil
d. Antifreeze (ethylene glycol)
e. Train wash (potassium hydroxide)
f. Lead acid batteries (sulfuric acid)

The liquids are stored in tanks or drums within secondary containment. UTA also uses many hazardous chemicals contained in soaps, solvents, brake cleaners, paints, and aerosols. These hazardous materials are described in the product-specific safety data sheet.

UTA has small quantity generator and conditionally exempt generator status of hazardous waste at various facilities. Hazardous waste, as defined in 40 CFR, is a hazardous material that has outlived its usefulness or has become contaminated through use.

Hazardous wastes, can be generated by:

a. Discarding a hazardous material (oil-based paint, pesticides, some soaps, expired products)
b. Using a product (used batteries, fluorescent lamps, HID lamps, paint thinner, aerosol dregs)
c. Any hazardous substance generated from a process or procedure critical to maintenance or operations of Frontrunner, TRAX or Bus
d. Infectious biohazardous waste from bloodborne pathogens clean-up or discarded sharps clean-up.

Hazardous wastes are stored in closed containers and can be collected in satellite accumulation areas. These containers are labeled as hazardous waste for chemicals or biohazard for red infectious waste bins and are located near where the waste is generated. The environmental compliance administrators are responsible for preparing appropriate manifests, scheduling hazardous materials transportation, and final disposal.

2.3 INFECTIOUS DISEASE CONTROL AND RESPONSE

UTA's Safety Department and Emergency Management teams monitor the reports of infectious disease transmission, as provided through the Utah Department of Health. Based on these reports UTA also coordinates with local health departments to identify control strategies in an effort to minimize the transmission of infectious diseases.

UTAs Local Safety Committees and SSRC help determine the impact to UTAs operations using the hazard risk matrix for the proper level of response to help prevent the spread of infectious disease. Infectious disease mitigations may be tracked on the local and corporate hazard logs following the hazard management process.

Updates regarding infectious hazards that may pose a risk to the health and safety of UTAs customers and employees are provided as needed to the UTA executive team.

III ASSURANCE

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

3.1 INTERNAL SAFETY AUDIT/REVIEW PROGRAM

49 CFR § 673, identifies requirements for planned and scheduled internal safety audits. They are performed to evaluate compliance with UTA's Transit Agency Safety Plan (TASP). All TRAX rail service departments and functions are subject to review. UTA's Internal Safety and Security Audit/Review Programs contain a comprehensive series of processes utilized to determine the compliance and effectiveness of UTA's TASP/ System Security Plan (SSP) and Emergency Preparedness Plan (EPP), which are applicable to all departments or functions.

The ED has delegated authority to establish and implement the TASP to the Director of Safety & Security (DSS) who oversees the safety performance functions of UTA. The DSS has the responsibility to develop and implement programs to promote safe operations to reduce or eliminate accidents and to monitor TASP compliance and maintenance.

The DSS assigns responsibility and authority to the Internal Audit's programs coordinator, the Safety Administrators, and assigned internal auditor team members to interface with UDOT SSO, to provide the internal oversight of the rail TASP compliance; and to oversee the internal safety audits.

The audits program coordinator utilizes UTA's audit team members who conduct ongoing, planned, and scheduled internal safety audits, and performs reviews and inspections of UTA's departments and functions to evaluate compliance with TASP requirements. The audit coordinator also measures the overall effectiveness in achieving the goals and objectives of the TASP. UTA audit team members use a checklist approach to determine compliance based on 49 CFR 673.

Per 49 CFR Part 225, UTA is committed to complete an accurate reporting of accidents, incident, and injuries in our system. We encourage employee reporting and will not tolerate harassment or intimidation to discourage reporting. UTA collects reports for reportable incidents. These incidents are reviewed at AEG's and any applicable CAPs are assigned to mitigate risks found. Reports submitted to the FRA are audited annually to ensure accurate and complete reporting.

The internal audits programs coordinator will ensure that auditors are independent from the first line of supervision responsible for the activity being audited. This means that audit team members will not be assigned to audit the workgroup they are assigned to. As an example, Safety Department personnel will not be assigned to audit other Safety Department personnel.

UTA uses the "Recommended Best Practices for States Conducting Three-Year Safety Reviews" document produced by the FTA Office of Safety and Security from March 2009. This document identifies eight (8) types of verification methods that can be used by the internal auditors, which are listed below. These are the same

guidelines that the State Safety Oversight (SSO) uses for UTA three-year Triennial audits. It is recommended that the internal auditors use more than one method to verify compliance. Depending on the area being inspected a field visit, which allows, observation of processes and personnel may be required.

1. **Document Review**: sampling the UTA TASP and referenced and or supporting procedures to ensure that each required element of the State's Program Standard and 49 CFR part 673 is addressed. (This reference/requirement is noted on the Internal Audit Form for the element being audited.)
2. **Rules Review**: Sampling of UTA operating rules and bulletins and maintenance rules and procedures to determine if they have been reviewed and updated on a regular basis, if they have been distributed to appropriate UTA personnel as specified in the TASP, if training has been offered, and if this process has been tracked. Rules compliance is verified by supervisors. Auditors should ask supervisor personnel and or Safety personnel to provide examples of Rules Checks which have been accomplished during the previous audit period. Safety personnel observe/audit supervisors to verify that they are conducting Rules Checks. Auditors should verify that these processes are occurring.
3. **Records Review**: Sampling of the UTA records for evidence of implementation of the TASP and referenced or supporting procedures. Records reviewed and or sampled may include, but not limited to, training records, records of employee rules compliance checks, internal safety audit reports, maintenance inspection reports, minutes of safety committee meetings, etc.
4. **Interviews with UTA Senior Management**: discussions held with senior UTA management, including the UTA Executive Directors, to assess their knowledge of the UTA safety program, as specified in the TASP and referenced or supporting procedures, and to gauge their commitment to the safety program.
5. **Interviews with UTA Safety personnel**: Discussion held with UTA safety personnel, including the Safety and Security Director, to assess implementation of the UTA safety program, to identify issues in its implementation, and to highlight areas of compliance and non-compliance with Part 673 requirements. Safety personnel should provide evidence of system rides, interviews with operators, mechanics, supervisors and passengers to assess safety compliance and or hazard observations throughout the system.
6. **Interviews with other UTA personnel**: Discussions held with other UTA personnel (including a representative sample of rank-and-file operations and maintenance personnel) to verify their understanding of requirements specified in the TASP and referenced or supporting procedures.
7. **Field Observations**: Some departments and functions REQUIRE the auditors to make field or work area observations. This requirement will be noted on the Internal Audit Checklist for that specific area and auditors may be required to schedule times when specific field work is being done to allow for observations to be conducted. Observations and sampling conducted on-site at the UTA to observe implementation of the processes and procedures described in the TASP and supporting or referenced documents, procedures and materials related to the UTA safety program. Although auditors are not expected to be experts in Rules or mechanical processes, they should make field observations to verify that supervisors, who are technical experts, are performing and documenting technical field observations of operators, mechanics, MOW, Facilities Maintenance, etc. Field observations should also certify that rules compliance rules compliance, technical tests performed, repairs, etc. are being observed/documented.

8. **Inspections and Measurements**: Inspections and measurements conducted on-site at the UTA to ensure that the UTA infrastructure and equipment is maintained according to specifications identified in the UTA standards, procedures, and equipment manuals. Auditors should verify that supervisors are performing periodic rules and preventative maintenance on equipment checks. This can include reviews of key performance indicators (KPI) matrix, preventive maintenance schedules, work orders, etc.

> **Note**: Each of these verification methods has specific strengths and limitations. To adequately assess implementation of each TASP elements required in 673, FTA believes that more than one verification method should be used.

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

Audit teams may conduct field observations to make observations of the work process in the area being audited. Auditors should interview supervisors to verify compliance with rules and procedures. In addition to completing audit checklists, supporting documentation for verifying compliance with rules checks and compliance verification may also be submitted to the Internal Audit Coordinator as part of the audit. This will verify that rules checks and observation are an ongoing practice within the departments. Supporting documentation may be obtained from safety personnel and department supervisors. See A-3: for samples of the internal audit inspection checklists and schedule.

The audit team members will complete the Audit Checklist by completing all applicable verification methods of “Recommended Activities” used during the audit. Include copies of rules, processes, charts, etc. discussed as evidence of compliance or of non-compliance of specific requirements. In conjunction with the Safety Department and Internal Audit Coordinator will make a determination of “compliance” when a department or function is substantially adhering to the TASP requirements. Determination of compliance may include recommendations for improvement of TASP process activities or prevent future determinations of non-compliance. The department or function will review the recommendation and consider measures to improve process activities. In the event the department or function is substantially not adhering to the TASP, then a finding of non-compliance, along with a corrective action plan (CAP) will be issued to the department. That department is required to sign accepting responsibility to respond to or resolve the CAP and to provide a planned completion date. The CAP form contains a section for a proposed corrective action as well as a corrective action resolution to be filled in by the assigned department. Managers of departments have the responsibility to take corrective actions plan as recommended by the audit team reports. Upon completion the CAP must be adopted by the Safety Department, and by UDOT if required. Corrective action plans developed from audit findings of non-compliance with recommendations, and from compliance with recommendations are reviewed, accepted, and placed on the Safety Department Hazard log for tracking purposes by the Safety Department and Safety and Security Management Review Committee (SSRC) in coordination with UDOT SSO. Matters that are not resolved by the SSRC are referred to the GMSSC committee.

Each department or function is required to be audited as per UDOT’s Rail Transit State Safety Oversight Program Procedures and Standards. The Safety Administrator is responsible for developing a three-year schedule for all

internal audits. This schedule is distributed to all affected departments and to the state safety oversight manager. The schedule is furnished as a separate document to UDOT SSO.

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

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

The Safety Administrator completes individual audit reports and submits them to UDOT within 30 days of audit completion. In addition, the annual safety audit report, detailing UTA's internal safety and security review activities are submitted for the past year, with subsequent findings. The report is certified by the Executive Director, and forwarded to UDOT, on or before February 15 of the following year.

3.2 Accident Notification, Investigation, and Reporting

3.2.1 Notification Thresholds

3.2.1.1 Internal Notification

Initial internal incident/accident notification is initiated by UTA control centers (TRAX, FrontRunner, bus, paratransit, and police dispatch) electronically via text message and e-mail through the UTA emergency notification list, and the go team notification list, according to corporate policies and procedures, NO. 4.3.7 "Emergency Notification", and as specified by rail service SOPs and this document.

The controller will initiate internal notification resulting in the following: (OPS-SOP-0608)

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

Electronic notification requires the following information:

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

Workplace injuries that require the first report of injury form to be completed will require supervision to notify the Safety Department at the time of the events.

3.2.1.2 UDOT/SSO Notification

UTA has included on its emergency notification list UDOT's SSO and UDOT TOC. Following an accident, the UTA Safety department will follow up with state safety oversight, in person or by phone email or text message within two hours of any accident that results in the following:

a. Fatality occurring at the scene or within 30 days following the accident, excluding deaths resulting from illness, natural causes, and criminal homicides
b. One or more persons suffering serious injury
c. A collision involving a rail transit vehicle with any other vehicle, person, or object resulting in substantial property damage (requiring towing)
d. A runaway train
e. An evacuation for life safety reasons
f. Any derailment of a rail transit vehicle (yard and mainline)

Serious Occurrences are to be investigated by the transit agency and reported to UDOT within one business day.

a. Face up of rail vehicles: Two revenue transit vehicles enter the same block in signalized rail-exclusive territory; not including intentional moves such as coupling or vehicle storage, or street running territory.
b. Signal violations or overruns. This includes cases where UTA has determined a signal violation occurred, and violations of stop signals provided by a roadway worker.
c. Malfunctions of safety critical systems or equipment that could result in a catastrophic or single-point failure. Malfunction differs from “damage” under Incident criteria; would include more serious events such as loose railcar wheel or dropped underbody equipment.
d. Grade crossing warning system activation failure. Includes failures of gate arms and signals/lights but does not include broken gate arms.
e. Evacuation of train into the right of-way or onto adjacent track for non-life safety reason. Includes customer self-evacuation/transfer of passengers to rescue vehicles or alternant means of transportation due to obstructions, loss of power, mechanical breakdown and system failure, or damage. Evacuations for life safety reasons should instead be reported as an accident as described in an “accident”.
f. Incapacitated operator in service, i.e. An operator loses consciousness, falls asleep, or otherwise becomes physically incapable of operating the rail transit vehicle during revenue or non-revenue service.
g. Runaway rail transit maintenance vehicle. Excludes runaway trains, which are defined in the accident category per FTA requirements
h. Unpermitted rail vehicle encroachment into work zone

	Fatality	≥ 1 Injuries w/ Transport	Personal Injury that is not serious	Serious Injury	Damage that disrupts Ops	Collision	Runaway Train	Evac for Life Safety	Derail Anywhere	Close Call Vandalism /Theft	Serious violation
Accident	X			X		X	X	X	X		
Incident		X	X		X						
Occurrence										X	
Serious Occurrence											X

UDOT SSO contact information:

UTA employees in charge of notifications can send emails to udotsso@utah.gov in order to successfully notify all needed parties at once.

UDOT SSO Manager	Designated Back-Up
Jim Golden jimgolden@utah.gov 801.360.0052	**Robert Miles** robertmiles@utah.gov 801.910.2070

3.2.1.3 FRA Notification

For accidents that occur within FRA designated territory (1300 South to 6100 South and from 700 West Freight spur to 5600 West on Mid-Jordan Red Line), the FRA will be notified immediately by telephone by the Safety Department, using the National Response Center (NRC) at 1-800-424-0201 of any incident/accident resulting in the following as required by 49 CFR 225:

a. Death of a rail passenger or a railroad employee
b. Death of an employee of a contractor to a railroad performing work for the railroad on property owned, leased, or maintained by the contracting railroad
c. Death or injury to five or more persons
d. A train accident that results in serious injury to two or more train crewmember or passengers requiring their admission to a hospital
e. A train accident resulting in evacuation of a passenger train A fatality resulting from a train accident or train accident/incident at a highway-rail crossing when death occurs within 24 hours of the accident/incident
f. Collision occurring at a Grade Crossing
g. A train accident resulting in damage of $150,000 or more to railroad and non-railroad property
h. A train accident resulting in damage of $25,000 or more to a passenger train, including railroad and non-railroad property
i. A collision or derailment on a main line that is used for scheduled passenger service, or that fouls a main line used for scheduled passenger service

3.2.1.4 NTSB Notification

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

a. A passenger or employee fatality or serious injury to two or more crew members or passengers requiring admission to a hospital
b. The evacuation of a passenger train
c. Damage to a tank car or container resulting in release of hazardous materials or involving evacuation of the general public
d. A fatality at a grade crossing

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

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

3.2.1.5 FTA Notification

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

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

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

3.2.1.6 UOSH Notification

The UTA Safety Department will notify Utah OSHA at 801-530-6901 within 8 hrs. of any workplace accident resulting in the following:

a. Fatalities (including heart attacks)
b. Admittance to the hospital
c. Amputations past the first digit on hand or foot
d. Heat, chemical or electrical burns which result in temporary or permanent impairment to the body
e. Electrical shocks
f. Major bone fractures
g. Any loss of consciousness in the workplace
h. Permanent or temporary impairment where part of the body is made functionally useless
i. Deep cuts
j. Sight impairment
k. Any injury or illness that may shorten the worker’s life or significantly alter a normal physical or mental ability (either temporarily or permanently), such as visual or hearing impairment

3.2.2 Accident and Serious Occurrence Investigation Process

UDOT SSO has formally authorized UTA to conduct its own investigation of Light Rail accidents and Serious Occurrences and will utilize UTA's investigation as its own investigation, unless UDOT SSO decides to conduct its own investigation. UDOT may decide to conduct an independent investigation in addition to the transit agency's investigation. Accidents and Serious Occurrences that are investigated by UTA are conducted per Corporate Policy 4.5.2 Post Incident Investigation Policy and Transit Services Rail Safety Investigation Procedure.

3.2.2.1 Accident Investigation

Rail accidents that require two-hour notification to the UDOT SSO will be investigated by the Safety department. Rail investigation will be conducted in accordance with the Rail Safety Investigation Procedure. The Rail Safety Investigation Procedure can be found on the Safety Department share drive. A third-party investigation (contract expertise) will be assessed on a case-by-case basis in consultation with UDOT.

3.2.2.2 Workplace Injury Investigations

Workplace injuries that require employees to complete the first report of injury must be investigated at a minimum by a supervisor. If during the investigation process a hazard is identified, the hazard identification form must be filled out and tracked until the hazard is mitigated. In the event of serious injury or death the Safety Department will conduct a formal investigation.

a. Fatality
b. Fractures
c. Injury or illness resulting in immediate admittance to the hospital
d. Amputation
e. Deep cuts
f. Severe burns
g. Electric shock
h. Sight impairment
i. Loss of consciousness or concussions

3.2.3 Reporting Accidents

3.2.3.1 Reporting to UDOT SSO

Reports and corrective actions are available to UDOT which includes all events that meet reportable UDOT thresholds and are reviewed during monthly coordination meetings.

In conducting an accident or serious occurrence investigation, UTA will provide UDOT SSO the following:

Preliminary Written Report: As soon as possible after the accident, but within three business days the transit agency must email preliminary written information, including any accident investigation summary information, preliminary reports from field personnel, and other available information.

Investigation Status Report: At the request of UDOT SSO, UTA will provide a report indicating status of the investigation, including any significant new reports or report components, and any preliminary investigation conclusions within 10 days of the accident.

Draft Final Accident Report: Within 30 days of the accident, the Safety department will submit a draft final report to UDOT SSO for acceptance. This report will include the corrective action plan (CAP) as approved by the UTA Accident Evaluation Group (AEG). If UTA requires additional time to complete the investigation activities, then UTA shall request additional time from UDOT SSO.

Final Accident Report: After UDOT adopts the draft accident report, as signified by the SSO's signature, UTA will create a non-alterable version of the final report and submit it to UDOT SSO. UTA will retain final reports on the safety network drive.

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

a. Executive summary
b. Sequence of events, including a comprehensive description of injuries, fatalities, and property damage with estimated dollar value
c. Clear description of events before, during, and after the accident/incident
d. Findings and analysis, including investigation activities
e. Description of the investigation process and methodology
f. Description of post-accident/incident testing and research conducted
g. Employee training, drug and alcohol testing, and fatigue considerations
h. Information and feedback from employees interviewed
i. Post-event inspection of infrastructure, vehicles, or facilities
j. pre-event compliance with required maintenance
k. Sufficiency of UTA’s existing training, rules, and procedures
l. sufficiency of existing design
m. Conclusions, including any findings
n. Probable and contributory causes
o. Recommendations to prevent reoccurrence
p. Supporting analysis to defend any recommendations made
q. Short- and long-term actions

r. Changes to rules, policies, or procedures
s. CAP(s) to address any findings resulting from the investigation.

UDOT reports all reportable FTA events in an annual report.

3.2.3.2 Reporting to FRA

The UTA Safety department will submit required reports per 49 CFR 225, for accident/incidents using the AIRGNET reporting software, for accidents/incidents that occur within FRA operating territory.

3.2.3.3 Reporting to National Transit Database (NTD)

As part of complying with reporting requirements to the Nation Transit Database, UTA will submit monthly safety summary event reports (S&S-50) and any major event report (S&S-40) forms for both bus and light rail operations that meet reporting thresholds defined by the NTD within 30 days.

3.2.3.4 Reporting within UTA

The UTA safety reports are made available to the Director of Safety and Security (DSS), Chief Operating Officer, and Regional General Managers (RGMs). Reports will be forwarded by the DSS to the ED as needed.

3.2.4 Corrective Action

3.2.4.1 Safety Department Review

The Safety department will initiate an investigation to determine causal or contributing factors for events it deems necessary. Findings from the investigation that identify serious or high hazards, will require a corrective action plan and will be placed on the safety department hazard log. The Safety department will then coordinate with the appropriate departments to develop a corrective action plan (CAP) and fill out a CAP for the identified hazard. The CAP form will be assigned a number and placed on hazard log with the corresponding hazard for tracking purposes.

The corrective action plan will contain:

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

3.2.4.2 UDOT Review

UTA will develop a corrective action plan (CAP) for submission to UDOT when:

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

The corrective action plan will contain:

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

d. Process or plan for implementation of plan
e. Date Corrective action plan was opened
f. Identify noted deficiency/finding/hazard
g. Cost resolving deficiency, if known or applicable

As part of developing a corrective action plan UTA may employ the use of an accident evaluation group (AEG).

An accident evaluation group will be organized to evaluate the following events:

a. Fatalities
b. Incidents involving multiple medical transports from the scene
c. Major component or system failure

The AEG will be comprised of key UTA staff from various department that would have a role in the development of the CAP. UDOT SSO will be an invited member to applicable AEG meetings and play an active role in identifying casual or contributing factors.

Each CAP resulting from an investigation, or from hazards or deficiencies identified, will be made available to UDOT SSO for review. The CAP form will be assigned a tracking number and placed on the hazard log with its identified hazard. Upon completion of the corrective action the Safety department will submit to UDOT the completed CAP form for adoption, signified by UDOT SSO's signature on the CAP form. The hazard log will then be updated to show the status of the identified hazard with its CAP to "CLOSED".

UTA will monitor all corrective action plans with the use of the safety department hazard log and will provide UDOT with an updated log monthly.

3.3 Safety Data Collection and Analysis

3.3.1 Data Collection

Safety data is collected and stored by the safety department personnel on a secured network drive (Safety Department S:\\ Drive). It is reviewed, analyzed, and provided to UTA general manager in the General Managers Safety and Security Committee (GMSSC) meetings to assist the organization in eliminating hazards (see A-2:).

Safety critical hazards are identified, investigated, reviewed, resolved, and tracked by the SSRC committee through the UTA TRAX and FrontRunner Safety Department Hazard Logs. The TRAX Safety Department Hazard Log is made available to UDOT SSO at any time through the Safety Department S:\\ Drive. SSO Manager has been given access to this drive to enable UDOT to have access to various data and documents.

TRAX accidents, incidents, and other safety events are recorded and tracked by the Safety Department using the light rail event tracker. The light rail event tracker is provided to the UDOT SSO quarterly prior to the quarterly meeting. It is also stored on the S:\\ Drive which UDOT has access to.

In addition, UTA personnel involved in an accident or incident are required to complete UTA's accident/incident report form (green sheet). On-scene supervisors file supervisor's accident /incident report forms. Copies of these documents, as well as any pictures are copied into the Safety Department drive by the Safety Administrator. Accidents and incidents, require a UTA Safety Administrator to complete a safety department investigation form.

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

The Safety Administrator(s) reviews TRAX and FrontRunner’s control center's daily logs and records events involving the rail system. Events meeting minimum threshold levels are reported to UDOT, FRA, and FTA as required by current regulations.

System event data is entered monthly into the National Transit Database, Commuter rail, and TRAX accidents occurring in FRA territory are reported to the Federal Railroad Administration using the on-line AIRGnet software provided by FRA.

Other sources of data include:

a. Control Logs
b. Accident/Incident Reports
c. Hazard Logs
d. UTA Police Reports
e. Employee Training records
f. Maintenance Records
g. Rules Checks Reports

3.3.2 Data Analysis

Data collected is analyzed on a regular basis and is used to evaluate safety performance and identify areas potentially requiring corrective action to reduce the number of events. Types of events that are used for this

analysis are areas where there is an increase or reoccurrence of accidents, incidents and occurrences as defined by the FTA.

Event data collected is also used to determine goal specific KPI's required by the FTA in specific areas including events, injuries, fatalities, and mean time between mechanical failures. Data collected is also tracked on UTA's safety dashboard and projects current accident rates while comparing them to the prior year. This data evaluation is used to determine the effectiveness of implemented mitigations and areas needing further evaluation and corrective action.

Rules checks, close calls and interviews are used as a means of proactive risk mitigation and is tracked on UTA's safety dashboard and is used to find, fix, and follow up on hazard identified and tracked on UTA's hazard logs.

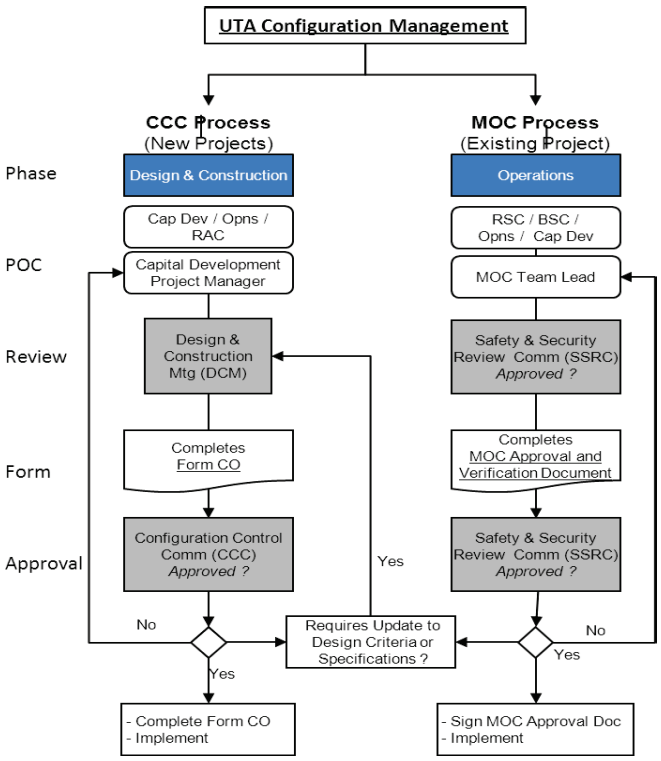
3.3.3 Continuous Improvement

UTA uses the concepts of continuous improvement throughout its entire organization including safety. UTA's utilization of the safety department hazard log and local department hazards logs allows for this process to be utilized. Safety committees review local department hazard logs on a monthly basis and create corrective actions for identified hazards. All closed hazards are documented and kept for historical reference for the purposes of tracking reoccurring hazards that may require additional mitigation. Safety department hazard logs are also reviewed on a monthly basis by the SSRC. The effectiveness of corrective actions that have been implemented are often used to determine if a specific hazard's risk has been sufficiently reduced needed for closure.

3.4 System Modifications (Management of Change)

System Modifications at UTA refer to changes in existing operating systems that require review and approval by the agency. Generally, the types of systems that operate within UTA consist of bus, light rail, and commuter rail. Included with each system type are the elements necessary to maintain revenue service operations for UTA's customers. Because existing operating systems have previously gone through UTA's rigorous safety and security verification and certification process prior to approval for beginning revenue services, system modifications at UTA utilize the Management of Change (MOC) process. The Safety and Security Review Committee (SSRC) chaired by the Safety Manager provides direction and oversight of any system modification.

The system modification process at UTA is designed to evaluate proposed changes and either mitigate entirely or minimize any impacts those changes will have on the people, procedures, equipment, vehicles, and environment of the system affected by the proposed changes. The safety and security concerns for these changes will be addressed and resolved prior to initiation of the change, or implementation within the system. All modifications of rail vehicles that meet the MOC criteria must first be reviewed and approved by the Manager of Technical Services prior to being presented to the SSRC for final approval. This process is outlined in light rail SOP 4800-0300-351 "Configuration Control of Light Rail Vehicle Fleet".



Configuration Management at UTA coordinates new systems or extensions by Capital Projects Department before they are implemented in the existing operating environment and is managed through the Configuration Control Committee (CCC) process during design and construction. The CCC process is more fully explained in the Capital Development SOP No. #003 and outlined in Configuration Control Committee (CCC) (4.1.2.8). The CCC process is managed at UTA by the Capital Projects Department and has representatives from each process involved at UTA. Capital Projects Department personnel will follow project guidance as outlined in the Project Control User Manual, Document Control (Section 4.0) and the development of files and file codes for projects as well as the electronic storage of documents in the SIRE system.

The flowchart on this page illustrates the current configuration management process.

3.4.1 MOC Authority

Authority to manage system changes is derived from the ED of Utah Transit Authority. The responsibility for implementing and enforcing MOC processes falls under the authority of each UTA executive and manager. Responsibility for change approvals falls under the authority of the Safety and Security Review Committee (SSRC), which is comprised of a group of experienced design, maintenance, and operational personnel from Bus, TRAX, FrontRunner, and Capital Projects Departments.

3.4.2 Management of Change (MOC) Process

The MOC process is an internal review and approval process managed by the SSRC. Proposed configuration modifications to existing bus, rail, and facilities infrastructure, systems, equipment, or vehicles will be reviewed and formally accepted for implementation by the SSRC committee. Each proposed change must be evaluated to determine the impact on an existing system regarding the areas of maintenance, operations, safety, and environmental, and security effects prior to any changes.

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

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

The process for implementing MOC solutions is as follows:

1. During normal operations, inspections, audits, or accident evaluations the bus and rail safety committees (BSC, RSC), or Capital Projects develop corrective action plans (CAPs) or planned modifications. If the cost of the CAP requires interdepartmental, intergovernmental coordination, or exceeds $ 5,000, the RSC / BSC will form a MOC team with a team lead (TL).
2. The TL will coordinate the resolution and complete the MOC approval and verification document (MOC document, format provided at end of this section).
3. The MOC action will be entered on the MOC log with a number assigned, as maintained by the Safety Department.
4. The issue and recommended solutions will be coordinated with the different affected departments during the development of the MOC document.
5. The MOC document, with recommended modification or corrective action, will be presented by the MOC TL at a SSRC for review and approval. It is recommended that the issue be brought to SSRC at the earliest opportunity to discuss the issue and provide direction, prior to presentation for approval.
6. The SSRC will review the proposed action, based on the considerations listed in the following section.
7. If approved by the SSRC, a minimum of two members will sign the MOC document.
8. MOC TL will implement the CAP, documenting compliance with the provisions stated.
9. When completed, the MOC TL will provide evidence to the SSRC of implementation and required integration testing or operational checks. As-built plan drawing changes and As-In-Service software (if applicable) will be given to the department responsible for future maintenance of the change.
10. Red-line drawings and As-In-Service software (if applicable) will be received from the contractor or other worker. These drawings and software will be filed within SIRE (electronically preferred) and provided to Capital Projects Engineers and or Facilities Maintenance Drawings.

The MOC log and corresponding hazard logs will be updated with close-out date of the completed action.

3.4.3 MOC Action Considerations

The SSRC will consider, at minimum, the following issues when evaluating a MOC action for approval:

a. Safety issues or hazards associated with the changes, including impact to safety-functional or safety-critical hazard mitigation processes
b. Environmental compliance issues
c. Security issues
d. New or modified maintenance concerns
e. Operations impacts of the change
f. Impact on operating rule book or standard operating procedures
g. Impact on public
h. Impact on personnel
i. Impact on other systems, including Positive Train Control (PTC)
j. Funding source
k. Schedule for implementation
l. Effect on safety certification process and critical items list (CIL)

3.4.4 MOC Log

The management of change log will record each requested and implemented action. A number will be assigned corresponding to the current year, then sequential number (12-001, 12-002, etc.). The MOC log will be maintained by the Safety Department on the safety drive (S:\\).

3.4.5 Notifying Departments

The MOC approval and verification document will be used to ensure notification to and coordination with affected departments. The document will provide the review of the action and recommendations to the department representative. The designated department representative will sign off on the document.

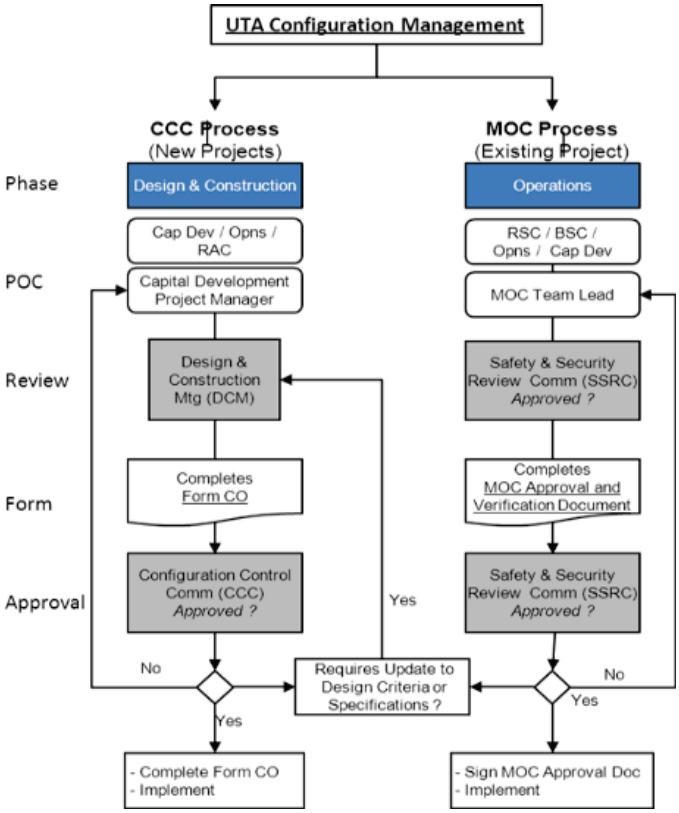
3.4.6 MOC Approval and Verification Document

The management of change process for each action will be presented to the SSRC with an approval and verification document in the following format with the requested information. Coordination, approval, and verification signatures will be completed at the appropriate time during the process

A sample MOC approval and verification document is provided in B-5:.

3.5 CONFIGURATION CONTROL

Configuration control within UTA is managed through the Configuration Control Committee (CCC) process during design and construction, and the management of change (MOC) process during operations. The CCC process is managed for UTA by the Capital Projects Department. The MOC process is managed by the Safety and Security Review Committee (SSRC) chaired by the Safety and Security Director.



The CCC process is managed for UTA by Capital Projects and coordinates new systems or extensions before they are implemented in the existing operating environment. Project managers employ the Project Management Plan (PMP) to guide capital project development and implementation. The Project Management Plan (PMP) will be used in conjunction with the Project Control User Manual by the Project Control Specialist. This manual is updated periodically and contains direction for as built and document control procedures. Specific guidance for document control procedures, File Creation (4.2), File codes, SIRE use (4.2), is provided in The Project Control User Manual Section 4.0. Smaller projects may include an abbreviated PMP specific to the project. Representatives from each involved department and safety are represented in the CCC process. Notification of project changes to existing structures or facilities which might have potential safety or security impacts to effected UTA personnel is critical. Additionally, public, or other effected groups shall be notified of any change which might have potential safety or security impacts. Effected personnel are invited to participate in project meetings and coordinate any changes. Additional training may be required. Operations and maintenance procedures, bulletins or SOP's may need to be developed. The general public may be affected. The Public Relations Department will assist with communications to outside agencies or effected groups and is an essential element of communication which must take place from the beginning of any project and at various stages of a project through completion and implementation of services impacted by a project. Any negative or hazardous impacts observed by a change must be reported to management personnel as soon as possible.

The flowchart illustrates the current configuration management process. For detailed discussion of the management of change process and documentation, see section SYSTEM MODIFICATIONS (MANAGEMENT OF CHANGE) 3.4.

The process always asks if any modifications to the design criteria are required. If so, changes are vetted through the Design and Construction Meeting (DCM) and incorporated into the next update of the criteria.

3.6 System Safety and Security Certification

3.6.1 Safety and Security Certification Program

The Safety and Security Certification (SSC) program is intended to help ensure that safety and security concerns, hazards, threats, and vulnerabilities are adequately addressed prior to the initiation of passenger operations for new rail and bus transit systems and subsequent major projects to extend, rehabilitate, or modify an existing system, or to replace vehicles and equipment. Such projects include:

- New rail and bus transit systems or system expansions
- Major reconstruction of existing lines
- Major redesign and installation of system components
- New or significantly reconstructed maintenance and operating facilities
- New vehicle procurements or mid-life overhauls
- Other projects deemed to have significant safety implications, including projects implemented by others that have a direct impact on the operations of UTA

UTA's System Security Plan and Emergency Preparedness Plan (EPP), separate documents, integrate and interacts the process for managing threats and vulnerabilities into the safety certification process.

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

UTA will also ensure that UDOT is invited to participate, as appropriate, in SSC-related meetings, document reviews such as engineering/design, and on-site project activities during the construction phase. UTA understands that UDOT may issue specific findings, guidance, or directives to the transit agency in order to address safety and security issues related to certifiable elements, certifiable items, and potential workarounds and will include those into the project SSC program as appropriate.

3.6.1.1 Safety and Security Major Capital Project Plans and Documents

UTA will develop a Safety and Security Certification Plan (SSCP) for each construction or installation project. If the project is light rail related, UTA will provide a copy of the SSCP plan to UDOT for review and comment feedback.

For FTA-funded capital projects that require an SSC program, UTA will also develop a Safety and Security Management Plan (SSMP) as part of the larger Project Management Plan requirements.

For capital projects that do not require an SSC program for FTA-funding, UTA will access the project scope factoring in the size and complexity of the project to determine what elements from the SSC program to apply to ensure that the necessary safety and security elements are implemented into smaller projects. The level of the SSC program implemented for each project will be documented in the SSCP along with the decision to exclude certain portions of the certification program.

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

Project Plans (with Safety Input)	Abbreviation	UTA Owner
Activation Plan	RAP	Project Dev (Cap Dev)
Bus Fleet Management Plan	BFMP	Project Manager
Construction Emergency Mgmt & Response Plan	ERP	Contractor by Project
Construction Safety Program Manual / Program Manual	CSPM/ CSSP	Contractor
Document Control Plan	DCP	Capital Projects
Emergency Preparedness Plan	EPP	Public Safety
Operation & Management Plan	O&MP	Project Manager
Operational Hazard Analysis	OHA	Safety Admin.
Preliminary Hazard Analysis	PHA	Project Manager
Project Management Plan	PMP	Project Manager
Rail Fleet Management Plan	RFMP	Project Manager
Rail Service Plan	RSP	Rail Ops
Real Estate Management Plan	RAMP	Project Manager
Safety & Security Certification Plan	SSCP	Project Manager
Safety and Security Certification Verification Report	SSCVR	Mgr Qual and Const Oversight
Safety & Security Mgmt Plan	SSMP	Project Manager
System Integration Test Plan	SITP	Contractor
System Security Plan	SSP	Manager of Security

3.6.2 Hazard Analysis

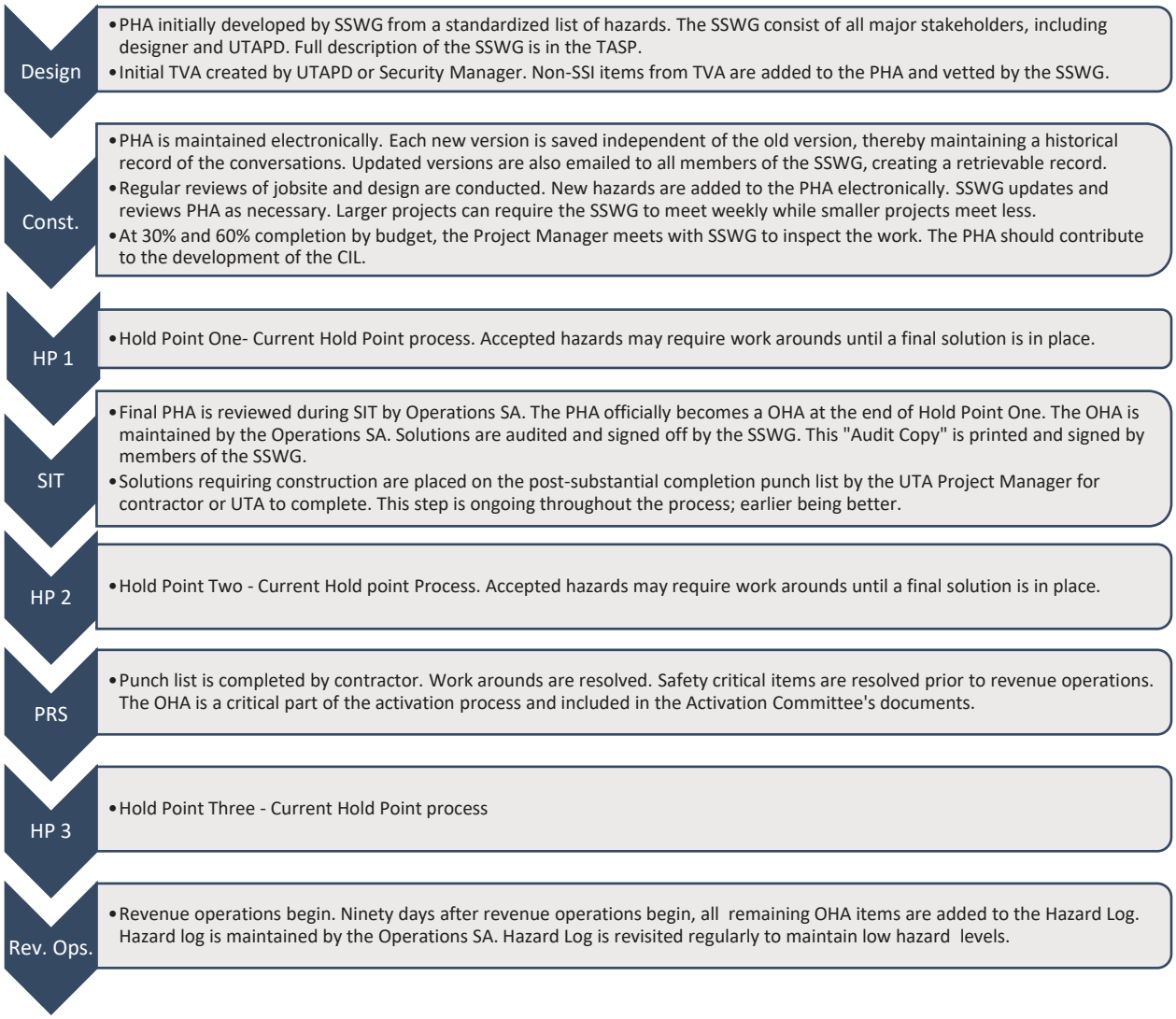
Risk analysis during the project's design and design safety reviews provides the basis to develop a preliminary hazard analysis (PHA) for the project. This PHA, typically maintained in a matrix log for the project, identifies hazards and potential hazards along the corridor, at platforms and in park and ride lots. The hazards are rated based on the risk analysis matrix (see 2.1.4.3 UTA Hazard Analysis Matrix) and possible solutions to these hazards are proposed. The solutions are then evaluated and incorporated into the design to mitigate or reduce the hazards to the maximum practicable extent.

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

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

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

into the safety department hazard log for that mode of transit (commuter rail, light rail, bus) to be tracked and resolved in the hazard management process (see 2.1.4.3 UTA Hazard Analysis Matrix). An illustration of this process follows this section.



3.6.2.1 Facilities Hazard Analysis

3.6.3 Project Certification / Hold Point Process

UTA's hold point process is important to verify that all prior steps of the certification process are complete, with any necessary hazard/open item mitigations established before the next phase begins.

UTA's "Hold Point" safety certification process is documented in the Activation Plan (AP), a separate document for each project, through the Activation Committee (AC). The AC will follow a proactive approach to examine, identify, and document safety and security critical certifiable elements and sub elements; utilizing UTA's approved certifiable items lists (CILs) for each certifiable element.

The RAC will maintain a master safety and security certifiable items list (CIL) for internal distribution, review, consideration, and incorporation of key safety critical elements and items into the Safety and Security elements of UTA's Design Criteria and checklists. (See B-3:). These documents are used to improve safety and functionality of system design, promote effective and efficient use of resources, reduce the number of workarounds and change orders, and reduce hazards in service and maintenance.

Hold Points are conducted before each commissioning phase of the project. Structured reviews and associated approvals will ensure a comprehensive review of all conditions before each phase is started to minimize, mitigate, or eliminate potential safety, testing or operating issues. These phases include the following:

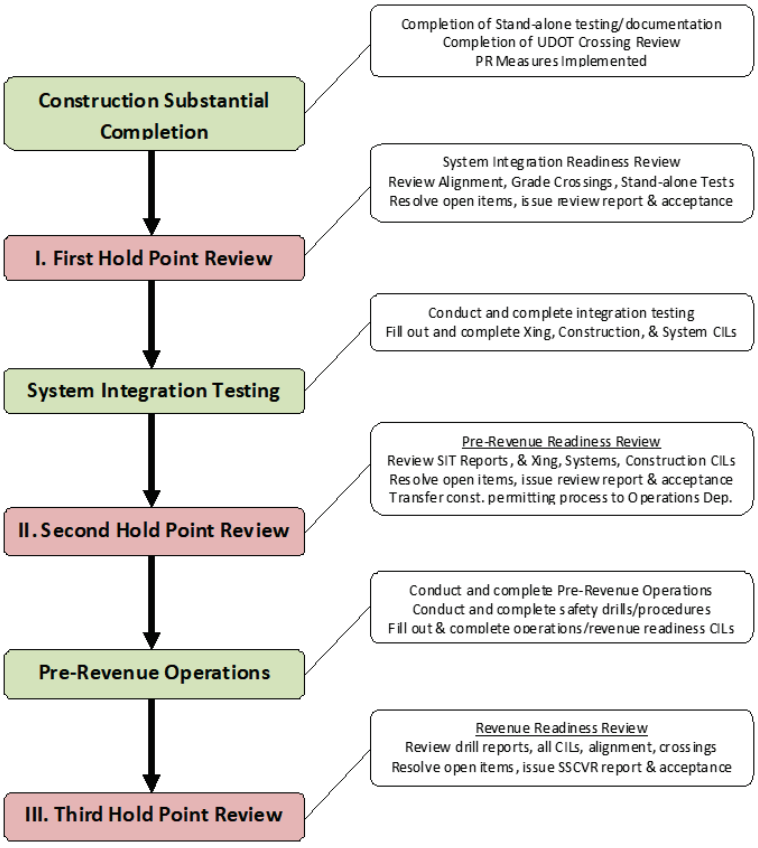
a. System integration/testing (SIT) Hold Point 1
b. Pre-revenue operations (PRO) Hold Point 2
c. Revenue operations (RO) Hold Point 3

A comprehensive review of all conditions will be conducted during the hold point period to eliminate or resolve all potential safety issues. Each of the three commissioning phases of a project presents a new set of operating conditions which can introduce safety concerns and/or hazards unforeseen during the design and construction process. The rail systems activation specialist is responsible for conducting all hold point reviews. He/she will coordinate the overall safety review effort, including the issuance and distribution of each report, indicating approval, by signature, to move to the next phase of commissioning.

During the activation hold point process, a report will be generated for each of the three hold points. Generally, each report will consist of the following detail:

a. Participants - those who are required to participate in the safety review.
b. Zones/reaches/areas which are reviewed.
c. List and verification of items or activities (CILs, testing) required and successfully completed.
d. Findings as a result of the review of the area, which require corrective action or approved workarounds.

Each report will be signed by the RAC members, and then by the approval authority, typically the Safety and Security Director before moving to the next phase of commissioning. Samples of the Hold Point approval documents are provided in B-4:.



The Mgr Qual and Const oversight prepares the final project safety and security certificate verification reports (SSCVR), with an exception/restriction resolution schedule and acceptable workarounds. The reports also

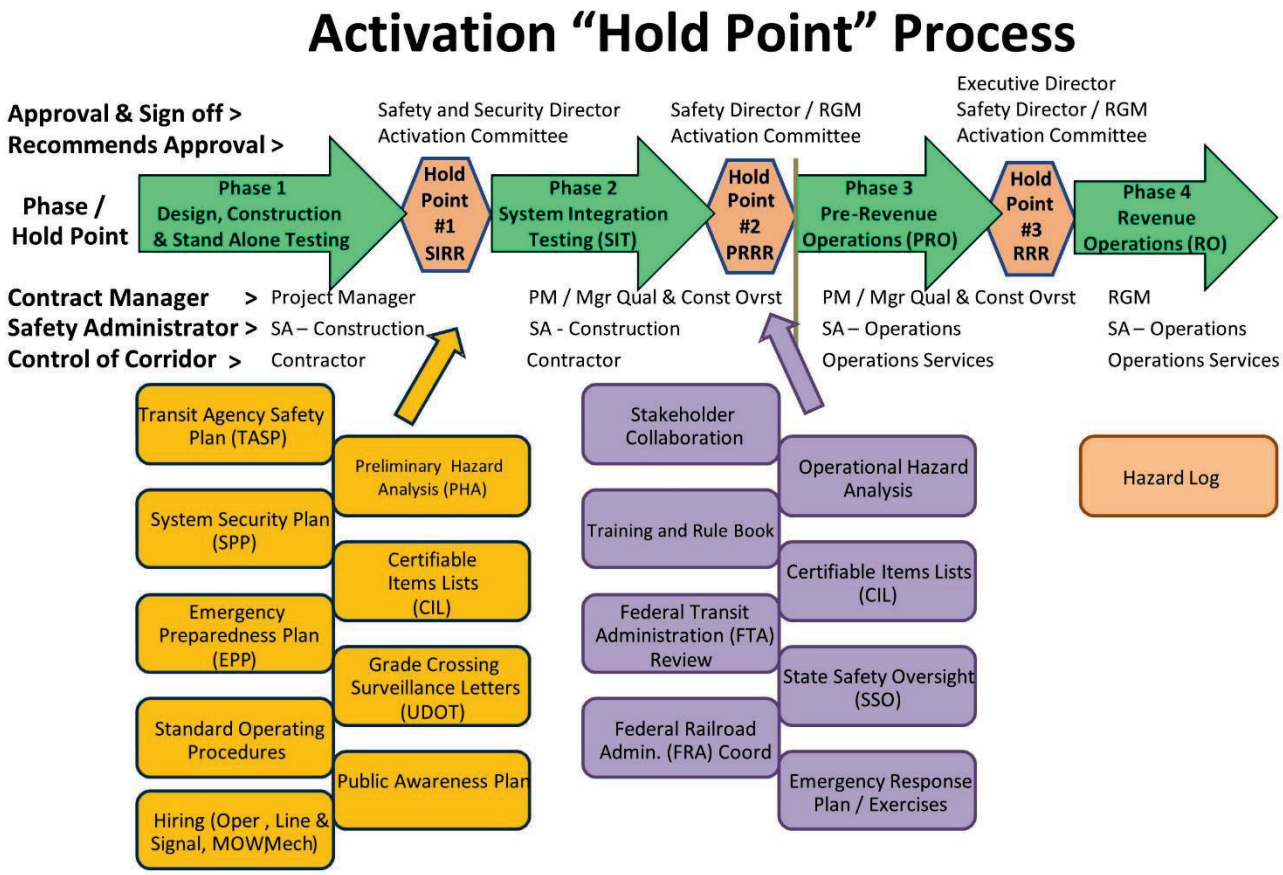
summarize the project readiness for revenue service by issuing certificates of compliance for each certifiable element, to the SSRC for review and acceptance. At the final hold point, the SSCVR is then submitted to the UTA ED and GM for formal approval by UTA's executive management. UTA will also make available the SSCVR testing and certification documentation for UDOT review and comment at least 120 hours (five days) prior to revenue service.

The SSCVR must include:

- Completed certificates of conformance or certificates of completion
    - Signed by all required stakeholders
    - Include an overall project certificate
    - Include individual certificates for each safety-certifiable element, such as, but not limited to, track, tunnels and structures, signaling systems, power systems, rail vehicles, facilities, stations, grade crossings, documents and plans, staffing and training
- Completed certifiable items lists with references to verification completed
- Include a list of all safety-certifiable elements that have not yet been completed, along with a description of mitigations and/or plans to complete each unfinished item

UDOT will respond with its comments no later than 48 hours (two days) before revenue service is expected to begin. If UDOT or a signatory to the SSCVR identifies open items that have not been mitigated, or testing/certification that has not been completed, revenue service cannot occur until those items have an implemented mitigation or are completed.

The ED will issue the project's final safety and security certification verification statement to the appropriate oversight agencies, authorizing UTA to commence passenger service pursuant to UTA's TASP.



3.6.4 Quality Assurance

Large projects at UTA have a quality assurance/quality control (QA/QC) function built into the design and construction of the project. Specific personnel are responsible for QA/QC activities. In general, QA/QC activities in large projects follow standard industry practice and are subject to review by the FTA and others. Quality control during construction projects is a requirement of the contractor and submitted in the Quality Management Plan (QMP) and approved by UTA prior to initiation of construction. UTA retains qualified inspectors and testing firms to provide Quality Assurance by document submittal reviews and periodic testing of materials throughout the project. On large federally funded projects, UTA and construction personnel will visit the manufacturing sites of rail & bus products to ensure quality prior to these products being shipped to the site.

The Supply Chain Department handles quality assurance for day-to-day procurement, inventory and warehouse activities. Received goods are compared to items ordered, lot numbering or other certifications as required on safety critical items. Where applicable, receiving personnel assure that lot number documentation is provided before materials are received or accepted. Periodically, purchasing personnel or Safety Administrators will randomly sample hardware, slings, lifting devices, and other devices for compliance with specifications. Items will also be periodically functionally tested to assure they meet standards.

3.7 RULES COMPLIANCE

3.7.1 TRAX RULES COMPLIANCE

3.7.1.1 Documents and Publications

3.7.1.1.1 TRAX Rule Book and Standard Operating Procedures (SOPs)

The TRAX Rule Book and Standard Operating Procedures (SOPs) describe policies, rules, and practices regarding the TRAX light rail system. The TRAX Rule Book and SOPs are maintained by Rail Service Operations. The TRAX Rule Book is reviewed annually, and SOPs are reviewed as needed, with a deep review to be held every three years by the Light Rail Services Policy and Procedure Review Forum (PPRF) and approved by the Regional General Manager (RGM). Changes, additions, or revisions that have been reviewed and approved by the PPRF and the Light Rail General Manager are circulated to all employees, requiring each to provide their signature (either holographical when a paper version is distributed or digitally after completing a Computer Based Training (CBT) module reviewing a change) confirming they have read and understand the TRAX Rule and SOPs. Train operators and employees working in the right-of-way are required to carry a current rule book.

3.7.1.1.2 TRAX Daily Operating Clearance:

TRAX issues a Daily Operating Clearance (DOC) that lists and describes advisories, bulletins, work permits and general comments. A Rule and SOP of the day are included on the Clearance. Yard and tail track movements are issued on a separate form. Employees are required to sign a daily log sheet confirming that they have read and received the daily operating clearance and yard and tail track movements for that date. UTA complies with all FRA rules, regulations and programs with exceptions as described in the joint use waiver.

3.7.1.2 Rule Compliance Checks

3.7.1.2.1 Operations: Operational Rule Compliance Testing

Observation tests are conducted by operations field supervisors as a part of their daily supervisory role to determine if an employee is compliant with rules, procedures, and regulations. Supervisors will conduct observed (the supervisor is in plain view of operators) and unobserved (a supervisor is making observations from a position that is not known or cannot be seen by operators) to ensure overall compliance. Each field supervisor is required to perform at least three observation tests every week during their field shifts at random times on random days based on train operations. All observation tests will be documented on the Operational Testing Form or by entering their observations into the Rules Observation Program (ROP). All paper records of operational tests are retained for three calendar years from the day of the test. Digital storage of entries into the ROP will be retained for three years from date of entry.

Operations training supervisors conduct biannual efficiency checks of all train operators to determine an employee's ability to comply with rules, regulations, and procedures. The efficiency check results are recorded by the operations supervisor and retained in the operator's training record folder. All operator training records are maintained by the operation training supervisor.

Operation field supervisors/controllers are evaluated for rules compliance by undergoing periodic controller and system evaluations conducted by the operations supervisor trainer. Applicable evaluation forms are completed by the operations supervisor trainer and signed by the evaluated supervisor. Completed and signed evaluation

forms are filed in the evaluated supervisor's training record folder. All supervisor training records are maintained by the operations supervisor trainer.

3.7.1.2.2 Maintenance of Way

Maintenance employees are randomly checked for compliance with rules set forth by the FRA. Twice a year, maintenance of way supervisors conducts random audits of employees working in rail transit rights-of-way for compliance with roadway worker regulations. As part of conducting rules compliance audits, supervisors fill out a corresponding form containing a rules compliance checklist for each employee. Rules compliance checks, passing and non- passing findings are tracked in a log maintained by the maintenance department.

3.7.1.2.3 LRV Maintenance

LRV Maintenance supervisor and leads conduct daily, weekly and monthly rules checks during their shift. These rules checks are documented on the LR vehicle maintenance pass down. Various items checked are employee adherence to using Blue Flag, Lockout Tag-Out, placement of chains (including forklifts), and crane inspections. This process is followed for all LRV running maintenance at each light rail shop. There is a QA/QC Supervisor that audits the weekly checks and reports the findings to the assistant managers for follow up and corrective action. This information is stored on the vehicle maintenance SharePoint page under QA/QC.

3.7.1.3 Reports and Data Analysis

Results of the operational tests are compiled on a rolling quarterly basis and reviewed by the Manager of Rail Operations or other designated person(s) and forwarded to the Safety Administrator every calendar quarter. A written form of the discussion and review will be provided to the Safety Department within 30 days after the end of the quarter. Additional information regarding operational tests is available to the Safety Administrator as needed on request.

3.7.1.4 Enforcement

3.7.1.4.1 Violations

Rule violations are addressed through the corporate positive people management process (PPM) which includes coaching, retraining, and formal discipline (performance agreement and termination) that may result in termination. See UTA Corporate Policy 6.3.1. Rail Operations maintains a log for all stop indications and wrong route violations and may further investigate any rules violation that is reported, or that may be part of an accident or incident. Additionally, all accidents and incidents are reviewed by supervisors and the Safety Administrator to determine if rules have been violated, or if revisions, changes, or additions are necessary.

3.7.1.4.2 Hazard Management

The Safety Administrator may incorporate violation trends or deficiencies for any rule or procedure into the hazard management program for resolution. Hazards unresolved by the Rail Safety Committee (RSC) are directed to the SSRC committee for further tracking, review, resolution, and or correction.

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

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

Rail Service and the Rail Safety Committee review rules and procedures regularly to determine if changes, revisions, or additions are necessary.

3.7.2 FrontRunner Rules Compliance

3.7.2.1 Documents and Publications

3.7.2.1.1 General Code of Operating Rules (GCOR)

FrontRunner uses the GCOR as their primary rule book for both operations and maintenance. The GCOR is updated frequently through biannual national committee meetings and published every five years. UTA has a representative at these meetings.

3.7.2.1.2 System Special Instructions (SSI) and General Orders

FrontRunner publishes a set of system special instructions (SSI) annually which are rules and instructions that are specific to operations. These changes include GCOR rule revisions, safety rules, signals, yard procedures, etc. Between publications of the SSI, a general order may be issued to add or revise a rule if needed. All operations employees must read, sign for, and carry all issued general orders until such time as they can be incorporated in the next version of the SSI.

3.7.2.1.3 FrontRunner Timetable

Operations employees must remain aware of and familiar with the FrontRunner timetable. The timetable contains information such as speed restrictions, station locations, switch speeds, siding locations, and other specific information that pertain to FrontRunner track.

3.7.2.2 Rule Compliance Checks

3.7.2.2.1 Operations: Efficiency Testing

To enforce rule compliance all FrontRunner operators and controllers are subject to efficiency testing. Efficiency testing is regulated by a designated testing officer and carried out by a select group of efficiency testing supervisors. Each efficiency testing supervisor is tasked to complete a minimum of four efficiency tests per quarter. At the end of the quarter the designated efficiency testing officer compiles a report summarizing the results for the quarter. The report is then kept on file for review by the FRA.

All operations employees must attend yearly “rules classes.” These classes cover all rule changes, additions, deletions, and revisions. Employees must pass a test given at the end of the class by a score of at least 90 percent.

3.7.2.3 Enforcement

3.7.2.3.1 Violations

Rule violations are addressed through the corporate positive people management process (PPM) which includes coaching, retraining, and formal discipline (written notification and performance agreement) which may result in termination. See UTA Corporate Policy 6.3.1. De-certifiable violations are recorded in the personnel file. All accidents and incidents are reviewed by the Controller Standards Group and the Safety Administrator to determine if rules have been violated, or if revisions, changes, or additions are necessary. Additionally, all major

accidents are reviewed at an Accident Evaluation Group. Frontrunner also enforces the following 49 CFR regulations: 49 CFR Part 240.129 – Criteria for monitoring operational performance of certified engineers.

49 CFR Part 240.117 – Criteria for consideration of operating rules compliance data.

49 CFR Part 217.9 – Program of operational tests and inspections: recordkeeping.

3.7.2.3.2 Hazard Management

The Safety Administrator may incorporate violation trends or deficiencies for any rule or procedure into the hazard management program for resolution. Hazards unresolved by the Rail Safety Committee (RSC) are directed to the SSRC committee for further tracking, review, resolution, and or correction.

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

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

Rail Service and the Rail Safety Committee review rules and procedures regularly to determine if changes, revisions, or additions are necessary.

3.7.3 Bus Rules Compliance

3.7.3.1 Documents and Publications

3.7.3.1.1 Bus Operations Employee Handbook and Standard Operating Procedures (SOPs)

In the Bus System, the Bus Operations Employee Handbook and Standard Operating Procedures (SOPs) describe its policies, rules, and practices regarding the Bus system. The Employee Handbook and SOPs are maintained by Bus Operations, reviewed annually, and approved by the Bus Regional General Managers (BGM). Changes, additions, or revisions are circulated to all employees affected by them.

3.7.3.1.2 Detours, Bulletins, Notices and Memos

Route detours are issued daily to all bus operators checking out their work for the day. As needed; bulletins, notices and memos addressing system issues, temporary changes in the operating system and changes in work duties are issued as needed. Not all changes affect all operators therefore bulletins, notices and memos issued do not require a signature from all operators. Employees are required to sign for critical information confirming that they have received, read, and understand the written instructions. UTA complies with all local, state, and federal requirements including but not limited to DOT, UOSH, FTA rules, regulations, and programs.

3.7.3.2 Rule Compliance Checks

3.7.3.2.1 Operations: Operational Rule Compliance

Operational field supervisors are tasked with performing rules compliance checks and observations. Observations are conducted by operations field supervisors as a part of their daily supervisory role to determine if an employee is compliant with rules, procedures, and regulations. There is no set frequency or required number of field observations that must be completed by Operational field supervisors on a daily basis. However,

Supervisors spend time each day in the system observing and performing compliance rules observations, accident investigation, responding to operational needs as they encounter them, etc.

When an operational field supervisor observes a rules violation the field supervisor will address the issue with the Bus Operator immediately and complete an Observation Report (OR). The completed Operational Report form is then forwarded to the employee's immediate supervisor to address and follow-up with the compliance issue.

Operational Supervisors issue an Operator Evaluation Report monthly to each of their team members. The Operator Evaluation Report addresses the following:

a. Attendance
b. Miss-outs
c. Accidents (Both chargeable and non-chargeable)
d. Complaints
e. Commendations

3.7.4 Safety Rules Compliance Checks and Verification

The Safety Department ensures Operations and Maintenance departments are in compliance with the rules and SOPs within their individual departments through the use of rules checks and verification audits. Findings from these checks are then forwarded to management for review and corrective action.

3.8 Facilities, Structures and Equipment Inspections

UTA's bus and rail facilities and equipment will be inspected on a regular basis according to company policies and SOPs, equipment manufacturer's guidelines and recommendations, and as required by local, state, and federal regulations.

Rail Facilities Maintenance employees utilize a “Facilities Maintenance Plan”. Assignments are made to individual maintenance employees to ensure the purpose and scope of the plan is fulfilled.

3.8.1 Facilities and Equipment to Be Inspected

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

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

3.8.2 Techniques, Schedules, and Procedures

Preventative maintenance inspection schedules are generated through the computer system per equipment manufacturer's guidelines and recommendations, and as required by local, state, and federal regulations. A maintenance supervisor identifies upcoming PM inspections and assigns the work out to their crew for completion. Inspectors use checklists (see 0) to identify potential physical hazards, unsafe equipment, unsafe acts, and policy and procedural deficiencies with the facility or equipment being inspected. Completed inspection reports and checklists are returned to the supervisor for review. Each department is responsible for maintaining inspection and repair records to confirm the inspection process.

3.8.2.1 M.O.W. (Line, Signal and Rail Maintenance) Standards and procedures

Line and Signal uses a maintenance of way plan “MOW Procedures” that outlines specific testing and maintenance procedures in accordance with FRA regulations. These are in accordance 49 CFR parts 233 - 236.

Right of way rail maintenance uses a maintenance plan “rail maintenance standards” to maintain the track in accordance with FRA regulations 49 CFR part 213. The standard outlines all aspects of proper maintenance and inspections regarding track.

3.8.3 Tracking and Resolving Hazards Identified During Inspections

Most safety hazards and concerns are resolved immediately by employees, and supervisors, and require no formal tracking process. Safety-critical hazards that cannot receive immediate attention are forwarded to the appropriate supervision and will be reported to the Safety Administrator or safety committee. An observed safety critical hazard that cannot be corrected in a timely manner will be entered into the safety department hazard log for tracking purposes and managed by the SSRC committee. A corrective action plan, responsible person, and completion date will be assigned. Follow-up inspections will verify that the hazard has been resolved.

3.8.4 Railroad Bridge Safety Management and Inspection Program

The railroad Bridge Safety Management Program (BSMP) has been developed and implemented by UTA to minimize damages and identify and repair deficiencies in bridges carrying UTA traffic, to safeguard their ability to carry UTA traffic, and to minimize risk of human casualties.

Capital Projects Department personnel have the responsibility to manage and inspect all rail bridges in accordance with 49 CFR Part 237, Bridge Safety Standard. Rail Bridge Engineers will assure that each structure is scheduled, inspected and any repairs or upgrades need to take place. Prior to all inspections, personnel will obtain a Rail Access Permit (FrontRunner or TRAX). Personnel will be current in training for Roadway Worker Protection and fully implement all necessary safety procedures during the performance of bridge inspections. Safety Department personnel have the responsibility to verify on a periodic basis (two inspections per year) the safe performance of bridge inspection program.

3.9 Maintenance Audits and Inspection Program

3.9.1 Equipment or Facilities Maintenance Audits and/ Inspections

It has been a long-established UTA policy and goal of the organization to prevent untimely and costly equipment failures. To this end, UTA has established inspection and preventative maintenance procedures for its track, switches and structures, overhead catenary system, signal system, vehicles with their associated mechanical and electrical components, and support equipment. Plans and guides are provided by Original Equipment Manufacturer (OEM) recommendations, Fleet Management Plans, Facility Maintenance Plan and System Operations and Maintenance Plans.

During preventative maintenance processes, hazards observed that are a safety issue which needs further evaluation should be presented to the Safety Committee and the issue or hazard placed on the Local Hazard log. If the hazard is considered high or serious it will be placed on the UTA Corporate Safety Hazard Log. Hazards not resolved within 180 days are elevated to the corporate Safety and Security Review Committee (SSRC).

Revenue vehicles have daily, monthly (or by miles), and annual inspections. Preventative maintenance work orders (PMs) assure these failures do not occur. TRAX, bus and FrontRunner commuter rail personnel work very closely with vehicle and equipment manufacturers and vendors to assure optimal operation. Applicable Federal Railroad Administration (FRA) maintenance requirements and UDOT state motor vehicle requirements are implemented into daily, weekly, monthly, and annual inspections for efficient and safe operation. For example, the LRV maintenance mechanics inspect light rail vehicles. Diesel locomotive maintenance mechanics maintain the FrontRunner equipment and bus maintenance mechanics maintain UTA's fleet of buses. They make sure all of the engines, transmissions, lights, warning devices, brakes, and other safety systems are working properly before putting the vehicles into service. These same vehicles are subject to preventative maintenance (PMs), where maintenance personnel inspect fluid levels, hose and line condition, brake condition, safety equipment, and other vehicle systems to assure that these items function properly. PMs may also call for the periodic change-out of various components in order to prevent failures. All applicable FRA maintenance equipment is inspected and repaired according to applicable CFR sections.

Facility maintenance personnel perform maintenance not only on facility equipment such as heating and air conditioning, elevators or escalators, but they also are responsible for the maintenance of large equipment components used to maintain trains such as the wheel truing machine, cranes, hydraulic or electric lifts, etc. that are critical to maintaining the various transportation modes.

Defects identified during inspections may be repaired immediately, if the situation allows it. For those items that cannot receive immediate attention as required by regulation a record should be made. Items on this list should be forwarded to the appropriate line authority level of supervision and/or may be reported to the appropriate safety committee. In either case, those inspecting the same area or equipment in the next cycle should maintain the list for follow-up. Notice of defects should result in a work order being generated for each item. This will allow the work order system to track the defect until it is resolved.

3.9.2 Auditors of Maintenance and Operations Activities

Managers and or Supervisors verify that maintenance procedures are performed. Triennially, UTA conducts internal audits to verify that this process is taking place. Additionally, UDOT (SSO) accompanies internal auditors

to assure that the internal audit process is occurring. This preserves the independent nature of the audit process since other organizational units are primarily involved with implementation of the audit items. Managers and supervisors of the areas being audited are invited to attend the audit; however, they do not conduct the internal audit. Other organizational units are required to cooperate with the rail supervisor or other designee in the conducting of internal audits.

3.9.3 Audit Report—Tracking and Resolving Internal Audit Findings

The internal auditor will schedule and conduct internal audits. UDOT is invited (with 30-day notice) to participate in the audit functions. Upon completion, the internal auditor submits an internal audit report to the business unit general manager for review. The report will include findings, conclusions, and recommendations. A summary of all internal audits performed during the year will be included in UTA's annual report to UDOT. Reports to UDOT will include corrective action plans for hazards identified. Audit activities are reported monthly to UDOT in their monthly meetings with UTA.

3.9.4 Follow-Up /Action Plans

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

3.9.5 Resolving Problems and Disagreements

Disagreements with audit findings may be challenged by the department supervisor or manager to the internal auditor or audit group. A review of the requirements and findings/non-conformances written up will be made. A written reply will be made within 30 days. If a disagreement remains, the issue will be elevated to the GMSSC meeting. A full review of the findings and disagreements will be presented at that time. The GMSSC members will decide an equitable resolution.

3.9.6 Use of a Written Checklist

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

3.9.7 Tracking and Resolving Hazards or Concerns

Defects identified during inspections may be repaired immediately, if the situation allows it, by on-site employees and supervisors. Safety critical hazards that cannot receive immediate attention will be noted on the inspection checklist (see A-5:). Items on this list are forwarded to the appropriate line authority level of supervision and/or may be reported to the appropriate safety committee. In either case, those inspecting the

same area or equipment in the next cycle should maintain the list for follow-up. Notice of defects should result in a work order being written for each item. This will allow the work order system to track the defect until it is resolved. An observed safety critical hazard that cannot be corrected in a timely manner will be entered into the safety department hazard log and managed by the SSRC committee. A corrective action plan (CAP), responsible person, and date will be assigned, and follow-up inspections will verify that the hazard has been resolved.

The majority of safety hazards and concerns are resolved immediately by employees and supervisors, and require no formal tracking process, other than the inspection checklist to show issues have been resolved. Some hazards or concerns that are not resolved in a reasonable manner or that involve other departments or require management review, are reported to the Rail Safety Committee (RSC) and Bus Safety Committee (BSC). If the matter is not resolved at this level, that it is referred to the Safety and Security Management Review Committee (SSRC). Please see the pertinent sections of the TASP describing RSC, SSRC, and hazard management processes.

3.10 Drug and Alcohol Program and Medical Monitoring

3.10.1 Drug and Alcohol Program

UTA is governed by the Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and US DOT Drug and Alcohol standards found in 49 CFR Parts 40, 219, and 655. It is also governed by 49 CFR Part 29, the Drug Free Workplace Act. In response to these requirements, UTA has established a drug and alcohol policy including an addendum for FrontRunner rail services. This UTA Corporate Policy (UTA.01.05 Drug & Alcohol Policy) meets all the above standards and is administered by UTA's designated employer representative (Department of Human Resources). The FTA and FRA regularly audit this policy and its effectiveness. The UTA drug and alcohol corporate policy and addendum for FrontRunner rail services are available to all UTA employees on the UTA intranet, under corporate policies.

3.10.2 Medical Monitoring

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

3.11 PROCUREMENT

3.11.1 MEASURES AND CONTROLS FOR THE PROCUREMENT PROCESS

The Supply Chain Department facilitates and oversees all procurement activities at UTA. Supply Chain resides within the Finance Department which operates under the direction of the Chief Financial Officer, who also acts as the Chief Procurement Officer. Procurement and Contracts Specialists facilitate procurement for large projects or contracts. All other buying is accomplished by and through the Inventory Buyers and Contract Buyers. Supply Chain also manages parts and warehousing. UTA Internal Auditing reviews purchasing procedures and practices and makes reports directly to the UTA Board of Trustees.

Employees who enter in a request for goods or services using the requisition self-service portal in JD Edwards are responsible for identifying materials or services that are safety-critical in the Justification section of the request. Safety-critical items include any equipment, service, or operation with a potential for major injury or damage to UTA equipment, passengers or employees. Requestors are responsible to include any supporting documentation to show that the requested materials or services meet Federal and State safety requirements, regulations, and standards in the Justification section of the requisition form. The requestor may enlist the help of the Safety Department to review these services or contracts for compliance with these regulations and standards prior to submitting the request. All purchasing requisitions are reviewed and approved at the department level by the requestor's direct supervisor. The safety department reviews and approves any requests for safety-critical items.

To ensure the acceptable products or services are delivered when orders are placed, vendors are provided with the specifications and required standards as supplied by the requestor in the requisition form. Prior to a contract being released, the contractor must agree to the contract language which requires personnel coming onto UTA property to follow all local, state, and federal safety and environmental laws.

All requests for the purchases of new hazardous chemical products must be recorded into a database, SafeTec, which includes a download of the chemicals safety data sheet (SDS) supplied from the vendor. Once in the database, safety and environmental administrators review the health, exposure, and other hazards for the product, and determine if the product is approved for purchase or rejected, or if safeguards should be implemented.

3.11.2 INSPECTION AND CONTROL OF MATERIALS

The Supply Chain Department handles quality assurance for day-to-day procurement activities. All materials received by UTA are inspected at the time of delivery. Receiving procedures requires inspection of received goods to assure that UTA is getting the items ordered and in the condition desired. Unauthorized hazardous chemicals or defective items are returned to the vendors and not accepted by UTA. Items and equipment received that have significant value and meet the definition of major capital assets defined in the corporate asset tracking policy are tracked in the Capital Asset Accounting System.

To further control safety, all specifications for parts and shop supplies are detailed on each part number in the item master file. Specifications include size, description, safety requirements, install instructions, warranty

information, supplier requirements, and reorder guidelines. The information can be viewed by all maintenance and purchasing personnel but editing access to the field is tightly restricted to the Inventory Control Analysts and the Senior Supply Chain Manager to avoid accidental removal of data and/or specifications. Each time an item in inventory reaches calculated minimum reorder points, an automated requisition is generated by the inventory system. That form prints with all the information and instructions detailed above.

Periodically, Supply Chain personnel or safety administrators will randomly sample hardware, slings, lifting devices, etc. for compliance with specifications. Periodically items will be functionally tested to assure they meet standards.

The UTA Tools Management Program is used to maintain the inventory of UTA owned tools and certain personal mechanics tools if the tools require periodic calibration or verification. Tools are calibrated according to the manufacturers required specifications and a calibration log is maintained in the tool inventory system. Supply chain parts clerks are responsible for tracking and checking out UTA managed tools to mechanics. Any tools found outside of the manufacture’s specifications or damaged tools are sent out for repair or replacement.

IV PROMOTION

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

4.1 TASP Implementation Activities and Responsibilities

4.1.1 TASP Committees and Position Responsibilities

UTA implements the TASP through a series of committees and department positions who have responsibility for specific areas yet work in a coordinated manner to ensure the safety of the authority. As related in section I 3.2, safety is a key responsibility of all managers at UTA. All employees have the right to present safety concerns to their immediate supervisor, manager, or Safety Administrators. Any employee, supervisor, or manager that brings an incident, accident, safety concern, or hazard, in good faith will not be adversely affected, or be subjected to harassment or intimidation. These retaliations are not tolerated by UTA.

4.1.1.1 Safety Communication

UTA Bus, Rail and Maintenance committees communicate information regarding employee hazards and safety risks through displayed department safety boards. Hazard logs created through committees are displayed and available for employees to review. In addition, department dashboards, memos and training may be provided to employees to communicate safety changes or hazard mitigations.

4.1.2 TASP Committees

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

4.1.2.1 General Managers Safety and Security Committee (GMSSC)

The General Managers Safety and Security Committee is UTA's highest level safety committee, chaired by the general manager, ED. The committee is alternately chaired by the Safety and Security Director. The GMSSC is comprised of the UTA corporate staff, which includes the executives, and the rail and business unit general managers.

The GMSSC reviews and approves safety policies, goals, and objectives. It coordinates the support and resources needed to maintain high safety standards for all aspects of service and system safety. The ED through the GMSSC, is the ultimate authority for safety certification, system modification, and configuration management. This authority includes approving each project's safety and security certification statement.

The GMSSC committee meets quarterly to review reports on safety, accident trends, major accidents, urgent or safety critical concerns or hazards, internal and external audit findings, certification recommendations, items referred from the

SSRC, and other items of concern to the GMSSC for comment, direction, resolution, and execution. Minutes are maintained and disseminated to members of the committee.

4.1.2.2 Safety and Security Review Committee (SSRC)

The Safety and Security Review Committee is a high-level system safety and security review and coordination committee overseeing on-going safety efforts within UTA. The committee is chaired by the Director of Safety & Security (DSS), and alternately chaired by the UTA security manager. The SSRC is comprised of the DSS, security manager and senior managers representing Rail Services (three managers), Bus Services (three), Capital Projects (one) and information technology (one). The committee oversees or takes the following actions:

a. Forwards to GMSSC unresolved safety and security issues and required certifications
b. Approves corrective action plans (CAP) for major accidents and safety critical items
c. Decides unresolved hazards for bus and rail systems
d. Ensures coordination of safety efforts between bus and rail systems
e. Reviews safety and security certifications
f. Approves management of change (MOC) solutions in the configuration management program
g. Sets standards for and reviews results of or approves the following programs:
    a. Hazard Management
    b. Security
    c. TASP updates
    d. Project safety plans and procedures, including the following:
    e. Rules compliance
    f. Emergency management
    g. Service inspection
    h. Training and certification
    i. Hazardous materials
    j. Drugs and alcohol
h. Ensures resolution of regulatory violations and non-compliance issues. (FRA, FTA, UDOT SSO, NTSB, OSHA, TSA, DHS)

Safety issues and actions are referred to the SSRC by design, construction, bus, rail, and fire / life safety committees. The SSRC may review as it selects, hazard analysis reports, risk assessments, corrective action reports, safety analysis, threat and vulnerability analysis, threat mitigations, hazard resolutions, NCRs, certification documentation, and fire/life safety concerns.

4.1.2.3 Management of Change (MOC) Teams

Configuration management within UTA consists of the CCC process during design and construction, and of the management of change (MOC) process during operations. The MOC process is more extensively examined in section III 4 of this TASP.

This process is controlled by the SSRC during operations. As part of this process MOC teams are assigned to resolve and implement corrective action plans (CAPs) to improve the system or correct an identified hazard. CAPs are developed by the respective safety committees (RSC, BSC) and approved by the SSRC. Responsible staff to lead the MOC team are recommended by the safety committee and approved by the SSRC. CAPs costing more than $5,000 require SSRC approval.

MOC process applies to existing bus and rail services systems, vehicles, facilities, and equipment that may not require formal safety certification, but which may have safety impacts.

4.1.2.4 Bus Safety Committee (BSC)

The bus safety committees coordinate on-going safety efforts within the operations and maintenance services of the bus system. They meet monthly to update and mitigate hazards in their facilities and on their systems. Committees are formed for the Ogden, Salt Lake, Building-8, Timpanogos, and Special Services business units.

The BSC committees are chaired by the regional general manager's delegate, the committees consist of the following:

1. Up to any manager within the unit
2. One operator and one maintenance staff from each facility:
    a. One Admin Representative
    b. One Union Representative
3. The Safety Administrator over Bus, who serves as a technical advisor and Co-Chair to the committee

The BSC chair position may be rotated annually, through the department's represented in the committee, with the new appointment made at the beginning of each year. The union appoints bargaining unit employees to the BSC annually to serve as safety representatives from the ranks of each department.

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

The BSC will maintain a local hazard log listing issues, corrective actions, and close-out dates. The log will include the date entered and the responsible party to correct the action. Most safety issues will be resolved within the parameters of the BSC. Issues not resolved in the BSC, or safety critical hazards, are referred to the SSRC.

BSC actions will include the following:

a. Reviews facility and operations system safety issues identified by members, staff, audits, or inspections
b. Maintains local hazard log for all facility and operational hazards
c. Assigns responsibility for correcting hazards
d. Reviews open items for completion
e. Ensure safety and regulatory rule compliance (FTA, OSHA)
f. Regularly conduct inspections of facilities and operations to verify corrective actions, and to review safety in the system
g. Report hazard log status and system safety review results to the SSRC

4.1.2.5 Joint Labor-Management Safety Committee

The joint labor-management safety committee was established in response to the Bipartisan Infrastructure Law and is responsible for approval of any revisions or updates to the UTA Transit Agency Safety Plan (TASP) prior to approval by the UTA Board of Directors. Any revision to the TASP must be approved by a majority of this committee. This committee meets quarterly and is responsible for:

1. Setting safety performance goals and risk reduction targets

2. Identifying and recommending risk-based mitigations or strategies to reduce the number and rates of accidents, injuries, and assaults on transit workers
3. Identifying safety deficiencies for purposes of continuous improvement
4. Identifying strategies to minimize the exposure of the public, personnel, and property to hazards and unsafe conditions
5. Identifying mitigations or strategies that may be ineffective, inappropriate, or were not implemented as intended.

This committee is comprised of an equal number of frontline bargaining unit employee representatives and management representatives. Bargaining unit representatives are appointed by the union to serve as safety representatives from the frontline ranks of each department at UTA. Management representatives are appointed by the UTA Chief Operations Officer and UTA Safety and Security Director. Individuals serving on this committee should have a working knowledge of safety issues, both in transit generally and specific to UTA.

4.1.2.6 Rail Safety Committee (RSC)

The rail safety committees (RSC) coordinate on-going safety efforts within the operations and maintenance services of the rail system under the direction of the RGM. They meet monthly to update and mitigate hazards in their facilities and on their systems. A committee is formed for TRAX (light rail) and for FrontRunner (commuter rail). The RGM appoints a chairman who may be a senior manager, or alternately chaired by the maintenance facility manager. The committees consist of the Operations manager or their appointed delegate, two representatives (one Union rep, one admin rep) from operations, LRV maintenance, Facility Maintenance, Maintenance of Way and a Safety Administrator, who serves as a technical advisor and Co-Chair to the committee. The corresponding maintenance facilities (Midvale, Jordan River, and Warm Springs rail service centers) are represented respectively on their RSC. The RSC chair position is rotated annually, through operations and the department represented in the committee, with a new appointment made at the beginning of each year. The union appoints bargaining unit employees to the RSC annually to serve as safety representatives from the ranks of each department, voicing safety concerns to the RSC.

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

The RSC will maintain a local hazard log listing issues, corrective actions, and close-out dates. The log will include the date entered and the responsible party to correct the action. Most safety issues will be resolved within the parameters of the RSC. Issues not resolved in the RSC, or safety critical hazards, are referred to the SSRC.

RSC actions are similar to those listed under the BSC above. Additionally, the RSC examines compliance with General Code of Operating Rules (GCOR), (FRA 49 CFR Part 214, 49 CFR 200-399; FTA 49 CFR 673).

4.1.2.7 Construction Safety Committee (CSC)

The Construction Safety Committee coordinates on-going safety efforts between construction contractors, reviews construction safety programs, conducts roadway worker protection training, and reviews claims summaries. The CSC is chaired by a Safety Administrator, and alternately chaired the UTA safety manager. The committee consists of the Capital Projects senior program manager-construction, Safety Administrators, RWP Manager, claims manager, contractor's safety managers, and construction managers. The CSC coordinates closely with the SSWG and participates in the PHA and TVA reviews.

The purpose and scope of the committee is to prevent accidents, illness, and casualties to UTA employees involved with all aspects of construction, inspection, and maintenance activities.

4.1.2.8 Configuration Control Committee (CCC)

The Configuration Control Committee (CCC) has been established as a management tool to assist in evaluating recommended changes to a particular project and providing final approval for configuration, budget design criteria changes. The CCC's function is to address the need for continuity through the entire life of the project. It is essential that changes to the project be communicated through the proper channels and that all necessary personnel have been notified. More importantly, the function is to monitor, evaluate, recommend, and carry out any changes in the scope of the project through all project stages.

The Capital Development SOP No. 003 has been developed to guide the CCC process and give direction and authority from the Director of Capital Projects to monitor progress of capital projects. This SOP also outlines the composition of the committee.

4.1.2.9 Activation Committee (AC)

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

UTA has instituted the use of the Activation Committee and the Hold Point process to bring on rail, new bus and facility projects. The membership of the committee may change slightly to best fit the role of the AC. The remainder of this section describes the project activation process.

Each discipline manager will be responsible for ensuring all certified items lists (CILs), procedures, tests, filing of documents, and any other assigned activities for his/her group are completed in accordance with applicable parts of the activation plan. Three of the four discipline managers, identified above, will each be assigned coordination responsibilities for one of the three activation primary functions-safety and security certification, system integration testing, and services. The AC will oversee and approve all activation documents and activities.

The Activation Manager (AM), with help from the AC, will ensure that the project follows the activation process, that all documents are properly completed and filed correctly, and that all necessary safety and security certifications are properly completed and signed before the project enters revenue service.

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

Following commencement of revenue operations, the AC provides "lessons learned" input to planning and design teams, and for improved processes for the next activation.

4.1.2.10 Safety and Security Working Group (SSWG)

The Safety and Security Working Group (SSWG) is established by the Project Manager for each project that significantly changes the interaction of employees or patrons with the UTA system. The SSWG examines the design and specifications of safety and security critical systems on the project. The SSWG is chaired by the PM, project director, or a designee. Primary responsibilities of the SSWG are to establish the preliminary hazard analysis, focus on and mitigate hazards on the project, and coordinate the project safety elements through design, construction, and activation. The threat and vulnerability assessment (TVA), if conducted, is also coordinated by the SSWG.

The SSWG begins during the design phase and conducts regular review meetings, separate from ongoing design efforts, to focus specifically on safety issues. The project manager ensures that safety considerations are continually considered during regular design reviews. Design modifications that are recommended to be incorporated into the UTA design criteria are referred to the Capital Projects civil design manager for review at the design and construction meeting (DCM). Modifications are then forwarded to the Configuration Control Committee (CCC) for approval if the modifications are significant enough.

Core members:

a. UTA Construction/Design Safety Admin
b. UTA Security Manager
c. UTA Video Security Admin
d. UTA Mode Safety Admin, if applicable

Members at Large:

a. UTA Project Manager
b. Designer/Architect
c. UTA Transit Police Officer
d. End User to include, as applicable
e. Facility Personnel

Operations

a. MOW
b. Admin Personnel
c. ADA Specialist

The intent of this committee is to review systems from an end-user perspective, looking for hazards that can be 1) engineered out of the system, 2) corrected with SOP, procedures, etc. or 3) addressed with PPE. The SSWG may not change the scope of the project but may make decisions that relate directly to the remediation of specific hazards. To this end, it is best for the SSWG to be included in the scope phase of the project plan.

The SSWG defines the job specific CILS and creates and maintains the PHA. If the SSWG determines that the residual risk of a hazard cannot be reduced below Medium, then the SSWG presents its findings to the SSRC for final risk analysis.

4.1.2.11 Accident Evaluation Group (AEG)

The AEG is comprised of key UTA staff from various departments that would have a role in the development of a Corrective Action plan resulting in UTA involved accidents. UDOT SSO will also be an invited member to applicable AEG meetings and play an active role in identifying casual or contributing factors.

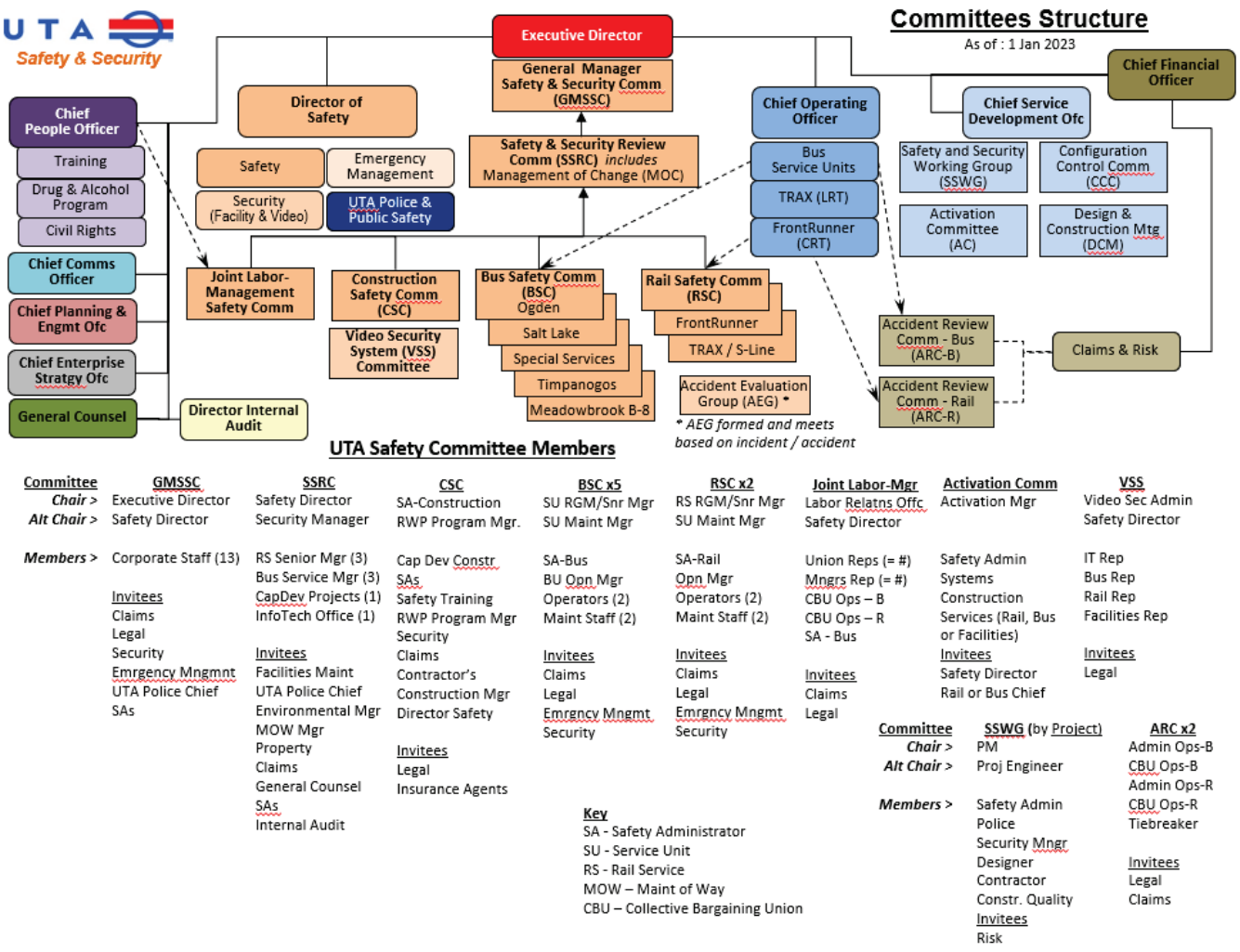
4.1.2.12 Accident Review Committee (ARC)

Accidents involving damage or injury are reviewed by the Accident Review Committee to determine whether it was avoidable or unavoidable. The ARC is coordinated through the claims department, and consists of two members of management, and two bargaining unit employees, who alternate chair the ARC. Each ARC will also have a tie-breaker member appointed, as accepted by management and the union.

Members of the ARC committee review each accident individually, and then render a sealed vote as to whether the accident is avoidable or unavoidable. The sealed votes are counted by the chair with a member of management, and a union representative. Avoidable accidents are charged against the operator or driver, and then classified for damage and injury severity, by UTA's claims unit. Avoidable severity classifications have varying degrees of disciplinary action, up to and including termination. See UTA Business Unit Standard Operating Procedure, No.BU6.8.1.7.

4.1.2.13 System Safety Committee Organizational Process Chart

UTA has formed a number of committees to combine and coordinate the efforts between system safety, rail service, capital projects, and other departments or agencies, to effectively address safety and security concerns. The current diagram of safety related committees is provided below.



UTA Safety Committee Members

Committee	GMSSC	SSRC	CSC	BSC x5	RSC x2	Joint Labor-Mgr	Activation Comm	VSS
Chair >	Executive Director	Safety Director	SA-Construction	SU RGM/Snr Mgr	RS RGM/Snr Mgr	Labor Relatns Offc	Activation Mgr	Video Sec Admin
Alt Chair >	Safety Director	Security Manager	RWP Program Mgr.	SU Maint Mgr	SU Maint Mgr	Safety Director		Safety Director
Members >	Corporate Staff (13)	RS Senior Mgr (3)	Cap Dev Constr	SA-Bus	SA-Rail	Union Reps (= #)	Safety Admin	IT Rep
		Bus Service Mgr (3)	SAs	BU Opn Mgr	Opn Mgr	Mngrs Rep (= #)	Systems	Bus Rep
	Invitees	CapDev Projects (1)	Safety Training	Operators (2)	Operators (2)	CBU Ops – B	Construction	Rail Rep
	Claims	InfoTech Office (1)	RWP Program Mgr	Maint Staff (2)	Maint Staff (2)	CBU Ops – R	Services (Rail, Bus	Facilities Rep
	Legal		Security			SA - Bus	or Facilities)	
	Security	Invitees	Claims	Invitees	Invitees		Invitees	Invitees
	Emrgency Mngmnt	Facilities Maint	Contractor's	Claims	Claims	Invitees	Safety Director	Legal
	UTA Police Chief	UTA Police Chief	Construction Mgr	Legal	Legal	Claims	Rail or Bus Chief	
	SAs	Environmental Mgr	Director Safety	Emrgncy Mngmt	Emrgncy Mngmt	Legal		
		MOW Mgr		Security	Security			
		Property	Invitees					
		Claims	Legal					
		General Counsel	Insurance Agents					
		SAs						
		Internal Audit						

Committee	SSWG (by Project)	ARC x2
Chair >	PM	Admin Ops-B
Alt Chair >	Proj Engineer	CBU Ops-B
		Admin Ops-R
Members >	Safety Admin	CBU Ops-R
	Police	Tiebreaker
	Security Mngr	
	Designer	Invitees
	Contractor	Legal
	Constr. Quality	Claims
	Invitees	
	Risk	

Key
SA - Safety Administrator
SU - Service Unit
RS - Rail Service
MOW – Maint of Way
CBU – Collective Bargaining Union

4.1.3 Department Position Responsibilities

All employees have the right and responsibility to address safety in their work area, and on the system, and to present safety concerns to their immediate supervisor, manager, or Safety Administrators. The Manager coordinates with safety committees and Safety Department to ensure that hazards are quickly and effectively eliminated. Specific departments and positions within UTA have inherent safety responsibilities. Those departments, illustrated in the UTA Safety Organization chart, and positions are addressed in the following matrix and sections.

4.1.3.1 System Safety and Related Tasks Matrix:

Safety Tasks	System Safety	Rail Ops.	Rail Veh. Maint	Rail MOW	Cap Dev	Fac. Maint	RSC/BSC	SSRC	GMSSC	UTA Board	HR
Prepare safety policy statements	P	S	S	S	S	S	RC, A	RC, A	A		S
Approve UTA corporate policy statements	S	S	S	S	S	S	S	S	A	A	S
Update TASP	P	RC,S	RC,S	P	RC,S	RC,S	S	RC, S	RC, A		RC,S
Hazard management process	P	S	S	S	S	S	P	P	P		
System modification	P	S	S	S	P	S	S	A			
Safety certification	P	S	S	S	P	S	S	P, RC	A		
Safety data collection and analysis	P	S	S	S	S	S	P	P	RC,A		
Accident/incident investigations	P	P	P	P		P	S	RC, A	RC,A		
Emergency management	P	S	S	S	S	S	S	RC, A	RC.A		
Internal safety audits and reviews	S	S	S	S	S	S	S	RC,A	RC,A		S
Rules compliance	P	P	P	P	P	P	S	RC,A			
Facilities/ equipment inspections	S	S	P	P	S	P	S	S			
Maintenance audits/inspections	S	S	P	P	S	P	S	S			
Training/ certification program-employees and contractors	P	P	P	P	P	P	S	S			
Configuration management/ control	P	S	S	S	P	S	S	RC,A	RC,A		
Local, state, federal requirements	P	P	P	P	P	P	S	S			
Hazardous material programs	P	S	P	P	P	P	S	S			
Drug and alcohol program	S	P	P	P	P	P	S	S			P
Procurement	S	P	P	P	P	P	S	RC,A			
Roadway worker program	P	S	P	P	P	P	S	S			
FRA rules, regulations, safety initiatives, programs	P	P	P	P	P	P	S	S			

P.....Primary Responsibility
S.....Support Responsibility
RC.....Review and Comment
A.....Approval

4.1.3.2 Safety Department

The Safety Department has review responsibility for Design, Construction, Light Rail (TRAX), Commuter Rail (FrontRunner), Bus, and Paratransit safety. Safety Administrators in the department have specific responsibilities within their areas - but are coordinated to assist throughout the organization. The Safety Department also promotes safety within UTA through weekly safety messages, monthly safety posters and involving UTA employees by rewarding good acts of safety and ideas. UTA also promotes safety within the community through ongoing education outreach though Operation Life Saver, community safety fair and trucking association presentations.

4.1.3.2.1 Director of Safety and Security

UTA Safety Department is led by the Director of Safety and Security who has direct reporting responsibility to the ED. The DSS has been delegated specific responsibilities, by the GMED, for the management of: system safety, occupational safety and health, accident and incident investigation, the continuous hazard management process, the internal safety audit process, oversight of construction safety, safety and security certification, safety data collection and analysis, industrial hygiene, safety training, safety program implementation, regulatory compliance, and monitoring the implementation of the TASP.

The DSS typically meets with the GM weekly, typically during Corporate Staff and Executive Team meetings to provide updates on safety issues, safety priorities and hazard management and the impacts of budget reductions and resource constraints on the performance of safety-related maintenance activities and requirements. The DSS coordinates safety activities will all other executives.

DSS leads the GMSSC and the SSRC meetings, manages the Safety Administrator and coordinates construction safety with Capital Projects Department. DSS serves as the approving authority during the System Safety Certification Program "hold point" process.

The DSS coordinates all activities of the Safety Administrators serving the operational functions of rail and bus.

4.1.3.2.2 Safety Administrator

The Safety Administrators develop and administer system safety within UTA including Transit Systems, Construction, and Instructional Design/Training. These responsibilities include: hazard mitigation and tracking logs, rules observations and compliance, developing, updating and conducting training on OSHA, SMS programs, and roadway worker protection for all contractors and administrative staff, conducts outreach in coordination with Planning and Public Relations, oversees safety curriculum, and maintains required training assignments, certifies safety trainers, oversees record keeping across UTA, completes weekly safety reports, coordinates with safety committees, coordinates FTA, FRA, UDOT SSO, TSA,OSHA activities and audits, conducts safety training programs, conducts and leads Fire Life Safety Committee activities and drills, enters and tracks NTD, and AIRGET accident data, oversees safety on all construction and renovation projects, conduct investigations, and inspections, verifies safety certification through activation phases of capital projects, collects safety data and prepares reports on incidents, accidents, and corrective actions plans.

4.1.3.2.3 Emergency Management Program Manager

The Emergency Management Program Manager (EMPM) has the responsibility for coordinating and implementing UTA’s emergency management activities (planning, training, exercises, response, and recovery), ensuring plans, SOPs, and SOGs are relevant. Additionally, the EMPM recommends and helps coordinate UTA emergency response supplies and equipment, coordinates UTA’s response plans with external agencies, and oversees UTA’s Emergency Preparedness Plan, and Emergency Response Plan’s.

4.1.3.2.4 UTA Chief of Police / Public Safety Manager

The UTA Chief of Police / Public Safety Manager reports to the Chief Operating Officer and is responsible for the day-to-day management of the safety and security of all operations, maintenance, and administration facilities of UTA rail, bus, and paratransit systems.

4.1.3.2.5 Roadway Worker Protection Program Manager

The UTA RWP Program Manager reports to the Director of Safety and Security and is responsible for the day-to-day management of the Roadway Worker Protection Program.

4.1.3.3 Operations Department

4.1.3.3.1 Chief Operating Officer

The Chief Operating Officer reports directly to the ED and is responsible for the day-to-day management of the safe operation and maintenance of the UTA rail, bus, and paratransit systems. The COO coordinates the General Managers for Rail and Regional General Managers (bus) in accomplishing this mission. The COO collaborates with the Safety and Security Director and all members of the Executive Team to effectively implement this Transit Agency Safety Plan, Safety and Security Certification Program Plan, and Security Program Plans through the development and implementation of required plans, procedures, and processes. The COO also ensures appropriate resources are allocated for the implementation of safety projects and plans.

4.1.3.3.2 Light Rail General Manager

The Light Rail Service General Manager is responsible for guiding the planning, organizing, directing and controlling of all functions and activities of TRAX light rail and streetcar, technical services, and service planning including administration, development, employee relations, safety (with oversight from the Safety Department), budget, compliance, and customer service. Provides guidance in the development and implementation of standard operating procedures, safety regulations (with oversight from the Safety Department), and fee schedules for Light Rail in compliance with federal, state, county and municipal rules and regulations. Oversees long-range planning and development of Light Rail programs and projects. Assists the Chief Operating Officer in developing programs to meet the needs of citizens. Helps provide a culture of employee engagement by ensuring that all labor and employee relations matters, and activities are conducted in a manner consistent with UTA goals and mission.

4.1.3.3.3 Commuter Rail General Manager

The Commuter Rail Service General Manager is responsible for guiding the planning, organizing, directing and controlling all functions and activities of FrontRunner Commuter Rail, technical services, and service planning including administration, development, employee relations, safety (with oversight from the Safety Department), budget, compliance, and customer service, provides oversight and development and implementation of standard operating procedures, safety regulations, and fee schedules for commuter rail in compliance with federal, state, county and municipal rules and regulations. The Commuter Rail Service GM oversees long-range planning and development of Commuter Rail programs and projects and assists the Chief Operating Officer in developing programs to meet the needs of citizens. Additionally, the Commuter Rail Service GM helps provide a culture of employee engagement by ensuring that all labor and employee relations matters, and activities are conducted in a manner consistent with UTA goals and mission,

4.1.3.3.4 Director of Maintenance Support

The Director of Maintenance Support is responsible for all rail maintenance facilities and all rail corridor and system infrastructure (Maintenance of Way). The director ensures compliance with roadway worker protection training, training for all equipment workers within facilities.

The Director coordinates with safety committees and Safety Department to ensure that hazards are quickly and effectively eliminated.

4.1.3.3.5 Regional / Service General Managers (Bus/Special)

The Regional General Managers report to the COO and have the day-to-day responsibility for the safe operation, and hazard processes of the bus and paratransit systems and maintenance facilities. The RGMs ensure compliance with driver and maintenance operations and safety training.

4.1.3.3.6 Chief Financial Officer

The Chief Financial Officer reports directly to the ED and has the responsibility for the offices of Accounting, Fares, Supply Chain, and Claims. Has responsibility for ensuring that only approved chemical and hazardous materials are procured, the requesting departments have coordinated safety and environmental requirements of contracts prior to advertisement.

4.1.3.3.7 Director of Capital Projects

The Director of Capital Projects reports to the Chief Service Development Officer, and has the responsibility for project development and delivery, construction, State of Good Repair projects, environmental, and grant administration. The Director has responsibility for ensuring approved designers and contractors are retained, design criteria, safety programs for construction are in place on all projects, construction and systems integration testing for all new rail, bus and facility projects.

4.1.3.3.8 Senior Program Managers

Senior Program Managers report to the Director of Capital Projects and have responsibility for Project Delivery, Construction and Quality, and Environmental compliance and mitigation. System Safety Certification Program, with "hold points", is the responsibility of the SPM project delivery.

4.1.3.3.9 Information Technology Director

The IT Director reports to the Chief of Enterprise Strategy and is responsible for developing, maintaining and securing UTA's enterprise computer systems and architecture; ensuring appropriate backup and recovery during emergency services; researching and implementing new technology systems to enhance transit services, and electronic fare collection.

4.1.3.3.10 Chief of Planning and Engagement Officer

The Chief Planning and Engagement Officer reports directly to the ED. They oversee the planning department, Community Engagement, Customer Experience, Innovative Mobility Solutions, and Customer Service.

4.1.3.3.11 Director of Planning

The Planning Director reports to the Chief of Planning and Engagement Officer They oversee a staff that is responsible for all the agencies’ long range transit planning, strategic business planning, financial planning and funds programming, transit-oriented development planning, as well as project development and system optimization

4.1.3.3.12 Senior Counsel to the Utah Transit Authority

The Senior Counsel reports directly to the ED, and is responsible to review and provide necessary legal advice on safety and environmental issues, managing liability and worker's compensation claims, reviewing new safety and environmental legislation, or regulations which may impact UTA's functions or operations,

4.1.3.3.13 Chief of Enterprise Strategy Officer

The Chief of Enterprise Strategy Officer oversees the Policy & Risk departments, Information Technology, Operations Analysis & Solutions, and Culture & Continuous Improvement.

4.2 Training and Certification Program

4.2.1 Employee and Contractor Safety

Training and certification are paramount concerns, and as such UTA has developed a number of educational programs. The following employee classifications perform work that requires safety training and or certification:

a. Train operators
b. Operations personnel (hosts, report, etc.)
c. Vehicle maintenance
d. Maintenance of way (infrastructure/systems)
e. Facility maintenance
f. Passenger facilities maintenance
g. Controllers
h. Other personal and contractors that foul or potentially foul UTA's rail right of way

4.2.1.1 Line and Signal Technicians and Rail Maintenance workers

Line and Signal technicians and Rail Maintenance workers are required to complete roadway worker training on an annual basis. Line and Signal Technicians undergo training that is conducted by Union Pacific Railroad. This training consists of 4 two week phases and includes all elements related to signals and crossings and their maintenance, trouble shooting, and repair. In addition to signal training employees may participate in a lineman's correspondence course after completing all phases of the signalmen's school. All equipment training is conducted as on the job training and is provided by the employee's direct supervisor. Rail Maintenance workers participate in two correspondence training courses: "Basic principles of track maintenance and advanced principles of track maintenance". After the completion of these courses a track maintenance worker must complete one year of maintenance work and must obtain approval of management before becoming a track inspector. Track Maintenance Supervisors must complete the same training to be able to inspect track. All equipment training is conducted as on the job training and is provided by the employee's direct supervisor.

4.2.2 Training and Certification for Employees and Contractors

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

UTA has developed a Construction Safety Program Manual that governs contractor safety specifically for contracted construction workers for UTA. This manual outlines procedures and responsibilities of UTA project managers and contractor personnel who contract with UTA to perform construction work activities. Additionally, the UTA safety goal is to achieve accident-free construction projects.

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

The UTA grants and contract administrator will review and implement into contract language requirements for the contract employees to meet. These contracts are written and reviewed by UTA's legal counsel as well as the contract administrator to assure that specific safety and environmental requirements for contract employees are met.

4.2.3 Work-Required Training for Employees and Contractors

All UTA employees and contractor personnel that will be working in the TRAX or FrontRunner corridors, who foul or have the potential to foul the tracks (within 10' of centerline of track), must receive the roadway worker protection training prior to beginning their work.

Contractors are responsible to train their employees on OSHA-required training prior to performing UTA projects. Other related training that contract employees and UTA employees will be current on includes the following:

a. Hazard communication
b. Blood-borne pathogen awareness hazardous energy control
c. General safety awareness
d. Work-required training for safety sensitive employees and contractors

Employees and contractors, who are under a legal contract with UTA, are obligated to comply with specific safety and environmental requirements and demonstrate quality of workmanship by observation and records reviews. Employees and or contract employees will meet the training, inspections, testing, and maintenance specifications as outlined in 49 CFR as it relates to commuter rail vehicle maintenance and personnel training. UTA supervisors, managers, and Safety Administrators are authorized to make regular observations of work being performed and will determine whether safety and environmental requirements are being complied with. The quality of materials and construction processes will also be reviewed by designated quality assurance personnel. Training courses given to employees and contractors will require that tests be completed prior to the completion of coursework. These will be the primary methods used to assure that compliance is obtained.

UTA identified tasks related to the inspection, testing, and maintenance required by Part 238.109 that must be performed on each type of equipment that FrontRunner operates.

4.2.4 Employee and Contractor Safety Programs

UTA has a multifaceted employee safety program. This program is developed by the operations performance office in conjunction with the various UTA departments affected by the program. The program is generally described in the UTA TASP, the Construction Safety Manual, and the FrontRunner and TRAX rulebooks. By this program, UTA, its management, staff, and employees are required to follow all applicable local, state, and federal regulations addressing safety. These regulations include the employee right to know provisions. The program also addresses standard industry practice for safety requirements. Within the operations performance office, the Safety Administrators are responsible to work with the line authority management to assure safety policy provisions are appropriate and being followed at Rail Services.

4.2.5 Construction Safety Requirements

The construction safety program is developed and managed by UTA Safety Administrators. This program defines construction safety functions and responsibilities and other construction safety requirements such as safety equipment, documentation, and safety personnel. All contractors and UTA employees must comply with Occupation Safety and

Health Administration (OSHA) rules and the requirements of the construction safety program, UTA Rail Services rule books, SOPs, and individual company contract agreements with UTA.

Contractors who have personnel working around rail systems may be regulated by 49 CFR Part 214, the Roadway Worker Protection Act. Responsive to that requirement, UTA has established a training and certification class for rail roadway workers. All construction and UTA employees who may work on or near the tracks are required to attend this training annually and obtain a certification card or sticker to keep on their person.

The UTA construction safety program will be reviewed and updated on a bi-annual (two-year) basis. The Safety Administrator will have primary responsibility for this update. The Safety Administrator will also be the responsible party for participating in the Federal Transit Administration (FTA Triennial Audits 49 CFR 673 as they are conducted each three-year cycle.

4.2.6 Training and Certification Training, Courses, Education

All safety related courses that are conducted in a classroom environment or through computer-based delivery are maintained electronically by the Safety Administrator over Safety training or by training staff at the departmental level.

Records for the following training: lineman's course, signal certification and basic/advanced track principles are maintained in the employee training records, in paper form and are available for audit and review. These records are available directly from the rail department managers. The training supervisor and management review the training records to determine completion. Most training is done annually, with all operators, employees, and supervisors being trained in the same month. These records are reviewed during the scheduled internal audits.

4.2.6.1 De-Escalation Training

Training on the de-escalation of potentially hostile interactions with members of the public are provided to operations and maintenance personnel. Local training groups are given discretion to select or develop training content to best fit the specific needs and scenarios most likely to be encountered by UTA employees in their supported areas.

4.2.6.2 Safety Administrators Certification

The Safety Department recognizes the FTA Transportation Safety Institute (TSI) to administer transit safety and security training certifications for all Safety Administrators at UTA. All Safety Administrators will complete the TSSP within the first two years of their safety assignment. This certification involves the successful completion of the Transit Safety and Security Program Certificate as outlined by TSI training manual. Courses required are:

a. Transit Rail/Bus System Safety
b. Transit Rail/Bus Incident Investigation
c. Effectively Managing Transit Emergencies
d. Safety Management Systems
e. SMS Awareness CBT
f. SMS Assurance Webinar

Note: Safety refresher training is typically held during safety department meetings.

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

4.2.7 Training Compliance Review

UTA Safety shall conduct periodic reviews of training materials and records to ensure compliance with safety training requirements.

4.2.7.1 Review of Assignment Completion and Record Keeping

The Safety Administrator responsible for safety training will review safety training records every six months to determine the status of safety training compliance. Other parties, such as the RWP Program Administrator and additional Safety Training Administrators may be invited to participate in the review process, based on the current needs and situation. This review will include the following actions:

1. Ascertain the level of compliance with existing safety training assignments across UTA
2. Discover and highlight any shortfalls or issues with training compliance, including a review of previously reported issues with training compliance to confirm they have been resolved
3. Forward these findings and recommendations to the Safety Committees responsible for impacted areas

Safety Committees will then be responsible to review the reported safety concerns and determine the appropriate interventions using the existing Hazard Management process.

4.2.7.2 Review of Training Content

Training content shall be reviewed as part of the process in place for the review and updating of the related UTA Safety Policies and Standard Operating Procedures.

4.3 LOCAL, STATE, AND FEDERAL REQUIREMENTS

4.3.1 CORPORATE POLICIES

The board of trustees, in their Policy Operational Directive for Safety (2.1. Safety No. 1.2.1), creates the foundation that ensures the safety of employees, passengers, and the public. The following corporate standards are incorporated into UTA's corporate policies that include local codes, state, federal, and OES&H standards, and other safety initiatives. Safety requirements are applicable to UTA employees, contractors, passengers, and the public.

4.3.1 Employee and Public Safety
4.3.5 Fire Protection and Evacuation Plans
4.3.6 Hazard Communication or Right to Know Policy (OSHA)
4.3.12 Personal Protective Equipment
4.3.15 Responding to Employee Complaints and Concerns
4.3.17 Safety Committee
4.3.20 Visitor Access
4.3.22 Safety Shoes (SOP) (Renumbered U 2.1.2.3)
4.3.23 Emergency Notification Policy
4.3.24 Safety Glasses Policy

4.3.1.1 Operations Safety Standards

OSH 4.211 Machine Equipment Safety Guarding Plan
OSH 4.146 Confined Space entry
OSH 4.1030 Exposure Control (BBP)
OSH 4.22 Fall Protection
OSH 4.147 Hazard Energy Control
OSH 4.95 Hearing Protection
OSH 4.33 Hot Work
OSH 4.176 Power Industrial Truck and Forklift Safety
OSH 4.179 Overhead lifting
OSH 4.1903 Regulatory Inspection Response
OSH 4.134 Respiratory protection
OSH 4.25 Roadway Response Safety
OSH 4.5 Safety Inspections and Audits
OSH 4.94 Spray Painting Operation
OSH 4.21-30 Walk and Working Surfaces

4.3.1.2 IV 3.3 Health and Environmental

4.4.1 Environmental Protection (Renumbered 4.1.5)
4.4.1-1 Environmental Protection (SOP)
4.4.2 Battery Recycling (SOP)
4.4.3 Electronic Waste and Mercury-Containing Equipment (SOP)
4.4.4 Hazardous Waste Management (SOP)
4.4.5 Parts Washer Solution Management (SOP)

4.4.6 Industrial Waste Water (SOP)
4.4.7 Public Transit Shelter Cleaning (SOP)
4.4.8 Spill Response and Reporting (SOP)
4.4.9 Storm Water Pollution Prevention (SOP)
4.4.10 Universal Waste Management (SOP)
4.4.11 Used Oil Filter Management (SOP)
4.4.12 Used Oil Management (SOP)
4.4.13 Vehicle Engine Idling

4.3.2 Occupational, Environmental, Safety and Health (OES&H)

An important aspect of safety compliance falls under Occupational, Environmental, Safety and Health (OES&H) rules, regulations, guidance, and initiatives. UTA's Safety Administrators work closely with managers, supervisors, and employees to ensure understanding of the various requirements of OES&H, as well as to other federal, state, and local rules, standards, and ordinances. All UTA employees receive awareness training on environmental management procedures, aspects, and commitments in their New Employee Orientation presentation. New employees are also trained by their supervisors on department environmental procedures involving SDS and hazard communication, recycling, spill response, excess idling, energy management, water conservation and reducing the UTA carbon footprint (greenhouse gas reduction).

The UTA Environmental Corporate Policy specifically requires UTA to be in compliance with legal requirements of all local, state, and federal laws.

Contractors performing work at UTA facilities, who bring chemicals onto UTA property, are required to participate in a Contractor Environmental Briefing which is presented to the contractor by the Environmental Compliance Administrator. During this briefing, UTA will understand what chemicals may be brought onto UTA property and understand the potential for spills or releases and impact on UTA if the chemicals are not handled according to manufacturer's recommendations. Copies of chemical Safety Data Sheets are provided to UTA by the contractors. Contractors must present their work plan and employee personal protection procedures for handling chemicals associated with the contracted work at UTA. At the conclusion of the contractor briefing, the contractor is required to sign the briefing with the Environmental Compliance Administrator. Contractor personnel who demonstrate a lack of understanding of applicable rules and procedures may be removed from the work site and require additional safety training be conducted. Briefing packages are maintained in the Environmental Department files. Additionally completed package briefings are kept on record with the UTA contracts department.

4.3.2.1 Construction Safety

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

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

4.3.2.2 Employee and Contractor Awareness of FRA Requirements

UTA employees and contractors are required to be aware of and comply with specific FRA regulations. Roadway Worker Protection (RWP) (49 CFR 214) is a safety requirement that employees and contractors must follow. Employees and contractors who may foul the tracks or have potential to foul the tracks while performing their work are required to receive specific Roadway Worker Protection training before they perform roadway work. The rail control centers have established a Work Permit which must be completed and submitted for approval prior to working on the tracks. Contractors and employees must receive RWP training and verify competency through testing. Track Access Coordinator reviews and verifies training requirements prior to approving work permits. Safety personnel and Rail Supervisor personnel may remove an employee or contractor from a worksite if he/she demonstrates a lack of knowledge and understanding of applicable RWP rules and procedures.

Contracts require compliance with specific UOSH regulations and employee safety programs as applicable to the work being performed. Safety personnel and rail supervisory personally conduct inspections of contractor worksites to assess contractor employee knowledge of and compliance with regulatory and contract requirements. Deficiencies are brought to the attention of contractor project managers for corrective action.

Specific UTA employees must comply with Hours of Service requirements set forth by the FRA while in the performance of specific job duties. Currently Train Operators, Operations Supervisor/Controllers and Line and Signal Technicians must comply with Hours of Service requirements.

4.3.2.3 Personal Protective Equipment

Appropriate personal protective equipment (PPE) such as safety glasses, safety boots, gloves, face shields and work uniforms, etc. is provided and is required to be used in performing various work by UTA personnel. This equipment is evaluated and approved by the safety department prior to procurement. Employees who are required to wear approved safety work boots use a tool or uniform allowance or may use a UTA P-card to make the purchase. UTA provides personal protective equipment and supervisors approve purchases as needed by the employees.

4.3.2.4 Safety and Industrial Hygiene Studies and Reviews

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

Industrial hygiene studies are conducted periodically to evaluate the degree of employee exposure to chemical and or physical agents encountered in the work environment. The evaluation results are utilized to determine the necessary

corrective action, including implementation of engineering and administrative controls required and the use of PPE. Examples of industrial hygiene testing performed include:

a. Noise level monitoring
b. Organic vapors or solvents
c. Measuring the particulate level of air quality
d. Concentrations of silica

4.3.2.5 Safety Training Effectiveness and Knowledge of Employees

UTA provides safety training for employees in accordance with UOSH requirements. Employees are tested on their knowledge of the course materials upon completion of the course. Supervisors are required to assess employee knowledge as necessary. Safety department personnel perform observations of employee and supervisor knowledge of safety regulatory requirements as part of facility and work site inspections and audits and may recommend refresher training as required.

4.3.3 Federal Railroad Administration and TRAX Light Rail

UTA's light rail service (TRAX) is one of the few transit agencies in America that is also regulated by the FRA, in addition to FTA, and UDOT SSO agencies. Portions of UTA's light railroad tracks share limited freight operations with railroad operators through temporal separation, and as such come under FRA jurisdiction. UTA ensures compliance with FRA regulations, as specified by 49 CFR Parts 213 to 240. UTA has received FRA waivers for a number of the CFR parts, as defined by a number of waiver agreements.

Joint FRA/FTA policy statements explain how these agencies coordinate their safety authority.

UTA rail Safety Administrators work closely with the FRA to ensure compliance, and to develop safety initiatives and programs to satisfy regulatory requirements.

4.3.4 Federal Railroad Administration and FrontRunner Commuter Rail

It is the intent of this Transit Agency Safety Plan to meet all of the applicable FRA requirements for commuter rail (FrontRunner) as well as the Light Rail system. This plan will not identify all of the specific requirements of 49 CFR; however, it will identify the parts that will be regulated by the FRA. Specific standard operating procedures (SOP) will be developed in each of the operating areas of maintenance and operations, with the exception of waivers that have been approved by the FRA for the operation of the Light Rail system. These procedures will identify the inspection, testing, and maintenance of numerous tasks. The following is a list of Code of Federal Railroad Administration Regulations (49 CFR) relating to commuter rail operating equipment on standard gage rail that operates on or is connected to the general railroad system. This list is taken from the Manual for the Development of System Safety Program Plans for Commuter Railroads published May 15, 2006, by APTA.

Part	49 CFR Title	Purpose or Brief Summary of the Standard
213	Track Safety Guidelines	Prescribes minimum safety requirements for railroad track maintenance.
214	Railroad Workplace Safety	Prevent accidents and injury while working on or near the track. Roadway Worker Protection Parts A, B, C, D.

217	Railroad Operating Rules	Rules and practices with respect to the operation of trains and equipment on the general railroad.
218	Railroad Operating Practices	Contains the minimum requirements for operating rules and practices, timetables, and special instructions.
219	Control of Alcohol and Drug Use	Prevent accidents in railroad operations that result from impairment of employees by alcohol or drugs.
40	Transportation Workplace Drug Testing	DOT procedures for drug and alcohol testing in the workplace.
220	Radio Guidelines and Procedures	Minimum requirements governing the use of wireless communication with railroad operations.
221	Rear-End Marking Devices	Minimum requirements governing highly visible marking devices for the trailing end of the rear car for all passenger, commuter, and freight trains.
222	Use of Locomotive Horns at Public Grade Crossings	To provide safety at public highway-rail grade crossings by requiring locomotive horn use at public highway rail-grade.
223	Safety Glazing Standards - Locomotives	Provides minimum standards for glazing materials in order to protect railroad employees and passengers from objects striking windows of locomotive, caboose, and passenger cars.
225	Railroad Accident and incidents Reports, Classifications, and Investigations	Provide FRA accurate information concerning hazards and risks that exist on the nation’s railroads.
228	Hours of Service of Railroad Employees	Prescribes reporting and record keeping requirements with respect to the hours of service of certain railroad employees. (See SOP 101.09)
229	Railroad Locomotive Safety Guidelines	This part prescribes minimum federal safety standards for all locomotives except those propelled by steam power.
231	Railroad Safety Appliance Guidelines	Appliances such as hand braking applications, coupling, running boards, ladders, steps, clearances, roof handholds, side handholds, etc.
232	Brake System Safety Standards for Freight and Other Non-Passenger Trains and Equipment; End of Train Devices	Sub-part “E” is for passenger trains; prescribes federal safety standards for freight and other non-passenger train brake systems and equipment. Sub-part “E” of this part prescribes federal safety standards not only for freight and other non-passenger trains, but also for passenger train brake systems.

233	Signal System Reporting Requirements	This part prescribes reporting requirements with respect to methods of train operation, block signal systems, automatic train stop, train control, and cab signal systems, or other similar appliances, methods, and systems.
234	Grade Crossing Signal System Safety	This part imposes minimum maintenance, inspection, and testing standards for highway-rail grade-crossing warning systems. This part also prescribes standards for the reporting of failures of such systems and prescribes minimum actions railroads must take when such warning systems malfunction.
236	Rules the Installation, Inspection, Maintenance, and Repair of Signal and Train Control Systems,	This part establishes the minimum requirements for rules, standards, and instructions for testing, inspection, and maintenance of train signal devices and appliances.
238	Passenger Equipment Safety Standards	The purpose of this part is to establish minimum safety planning requirements that will lead to the prevention of collisions, derailments, and other occurrences involving railroad passenger equipment that causes injury or death to railroad employees, railroad passengers, or the general public; and occurrences to the extent they cannot be prevented.
239	Passenger Train Emergency Preparedness	Applies to passenger railroads and prescribes minimum federal safety standards for the preparation, adoption, and implementation of emergency preparedness plans by railroads connected with the operation of passenger trains and requires each affected railroad to instruct its employees on the provisions of its plan.
240	Qualifications and Certification of Locomotive Engineers	Applies to all railroads, and establishes the minimum federal safety standards for training, testing, certification, and monitoring of all locomotive engineers to whom it applies regardless of the fact that a person may have a job classification title other than that of locomotive engineer.

V APPENDICES

APPENDIX A: INTERNAL REVIEW SCHEDULE (2022-2024)

	UTA TRAX Internal Review Schedule SAFETY 2022 to 2024					As of: August 2022		
#	TASP (SSPP) Internal Review Item/Chapter Departments Audited	Audit Frequency	UDOT Scheduled date	UDOT Notice Y/N	Date Last Completed	UTA Next Audit Date Completed / Due Date		
						2022	2023	2024
	UTA Policy							
1	Authority and policy Statement	Triennial					2023	
2	Goals and Objectives	Triennial				2022		
3	Overview of Management Structure	Triennial					2023	
4	TASP annual updates, Revisions and Changes	Triennial				2022		
	Risk Management							
5	Risk Management Program	Triennial				2022		
6	Hazardous Materials Program	Triennial					2023	
	Assurance							
7	Internal Safety Audit/Review Program	Triennial					2023	
8	Accident Notification, Investigation, and Reporting	Triennial						2024
9	Safety Data Collection and Analysis	Triennial					2023	
10	System Modifications (Management of Change)	Triennial						2024
11	Configuration Control	Triennial						2004
12	System Safety and Security Certification	Triennial				2022		
13	Rules Compliance	Triennial				2022		
15	Maintenance Audits and Inspection Program	Triennial				2022	2023	2024

16	Drug and Alcohol Program and Medical Monitoring	Triennial						2024
17	Procurement	Triennial						2024
Promotion								
18	TASP Implementation Activities and Responsibilities	Triennial			11/20		2023	
19	Training and Certification Program	Triennial			11/20			2024
20	Local, State, and Federal Requirements	Triennial			10/18		2023	
**was annual*								

UTA Internal Review Schedule - SECURITY 2021 to 2023

Item #	System Security Plan (SSP) Internal Review Item	Date/ Frequency	UDOT Scheduled date	Notice to UDOT ?	Date Last Completed	UTA Next Audit Date Completed / Due Date	
1	Policy Statements	Triennial				2022	
2	System Description	Triennial				2022	
3	Management of the System Security Program	Triennial				2022	
4	System Security Program Components	Triennial				2022	
5	Threat and Vulnerability Identification, Assessment and Resolution	Triennial			11/20		2023
6	Implementation and Evaluation of the System Security Plan (SSP)	Triennial			11/20		2023
7	Modification of the SSP	Triennial			11/20		2023

UTA External Review Schedule - SAFETY 2015 to 2018

External Reviewing Agency	Date / Frequency	Scheduled date	Notice Given UDOT SSO	Date Last Completed	Expected Schedule Date
FTA	Triennial		NA		
UDOT SSO	Triennial		NA		
Safety Management System (SMS)	Recert: Triennial Update: Annual		NA		

UTA External Review Schedule – SECURITY 2015 to 2018

External Reviewing Agency	Date/Frequency	Scheduled date	Notice Given UDOT SSO	Date Last Completed	Date next Scheduled
TSA BASE Audit	Triennial		NA		

APPENDIX B: SAMPLE DOCUMENTS

A-1: SAFETY DASHBOARD (SAMPLE)

UTA
Hazard Mitigation - Compliance - Continual Improvement

SAFETY & EMERGENCY MANAGEMENT
Dashboard
September/2022

Reactive -> Proactive -> Predictive
Find -> Fix -> Follow Up

Leading / Influencing Indicators

Safety Events	Monthly Admin	Monthly Bus	Monthly TRAX	Monthly FR	Monthly Total	Monthly Goal	Monthly %	YTD	Pace 2020	Pace 2021
Safety Commitee Mtgs	-	5	2	1	8	8	100%	60	89	77
Education Outreach	4	3	7	3	17	5	340%	82	119	106
# interviews	-	79	18	10	107	64	167%	804	1476	1037
# rides / observations	2	40	-	-	42	24	175%	377	626	486
Rules Checks-Safety	2	42	2,248	1	2,293	na	na	929	2338	1198
Rules Violations-Safety	-	1	79	-	80	na	na	559	624	721
Avg days on Hazard Log	-	167	749	285	300	180	na	na	na	na
# "High" open hazards	-	-	2	-	2	na	na	na	na	na
Hazards Closed (YTD)	-	63	4	6	73	na	na	73	165	94
Broken Gates	na	na	24	-	24	na	na	199	312	257
Trespassers	na	na	8	24	32	na	na	414	637	534
Emergency Brake	na	na	55	26	81	na	na	617	838	796
Near Miss Reports	na	na	na	3	3	na	na	6	42	8

Audits Rcmd / Findings	Rcmd	Findings	Submtd	Closed	% Closed
Triennial 2021	22	10	0	4	13%
UDOT HOS (Aug 2021)	0	0	0	0	0%
Totals	22	10	0	4	13%

Lagging Indicators
(Graphs on second page)

Bus	All Accidents Mo	All Accidents YTD	Avoidable Acc. Mo	Avoidable Acc. YTD	Avoidable Acc. %YTD	NTD Major Mo	NTD Major YTD	Pace 2021	Pace 2022	
Meadowbrook	10	139	4	42	30%	1	9	266	201	o
Central	6	58	2	19	33%	0	3	146	84	
Special Svcs	2	28	2	9	32%	0	2	79	40	
Ogden	7	41	2	15	37%	1	4	109	59	
Timpanogos	8	50	3	16	32%	1	4	61	72	
All Incidents	33	316	13	101	32%	3	22	661	316	

	Monthly		2021	Pace 2022
NTD Major Incidents	3	22 1-OV ren R-light hit OV pushing OV into bus, 1-Ov ren R-Ligl	66	32
NTD Major - Injuries	5	10	20	14
Summary Injuries	-	8	11	12
Fatalities	-	-	1	-

Employee Injuries	Mo	YTD	Jul-22	2021	Pace 2022	
Lost Time Injury	4	25	2-Fracture,1-Strain,1-Multiple	24	36	
Medical Injury	11	62	3-Strain,2-Contusion,1-Eye,1-Laceration,1-Assult,1-Sprain1-	84	90	
WC Report Only	13	84	5-Contusion,3-Stress,3-Strain,2-SlipTrip,1-Exposure	113	121	

TRAX -	Mo	YTD	Monthly	2021	2022
NTD Major Incidents	7	8	Tr v MV(6), Train v Ped(1)/Train v MV(2	43	10
NTD Major Injuries	3	7	Tr v MV (2)Tr vPed(1)/Train v MV (5)Tra	10	9
Summary Injuries	2	6	Passenger Fell(4)/Worker out(1)	10	8
Fatalities	1	2	Tr v Tres(0)/Tr v Tes(1)	2	3

S-LINE o	Mo	YTD	Monthly	2021	2022
NTD Major Incidents	0	0	NA / Train v MV	1	-
NTD Major Injuries	0	0		1	-
Summary Injuries	0	0		0	-
Fatalities	0	0		1	-

FrontRunner -	Mo	YTD	Monthly	2021	2022
FRA Major Incidents	0	8	NA ;Train v. MV Center Street No SLC,	8	10
Injuries	0	0		2	-
Fatalities	0	4		6	5

Improving / Good	+
Stable / Acceptable	o
Declining / Poor	-

Safety Training Courses

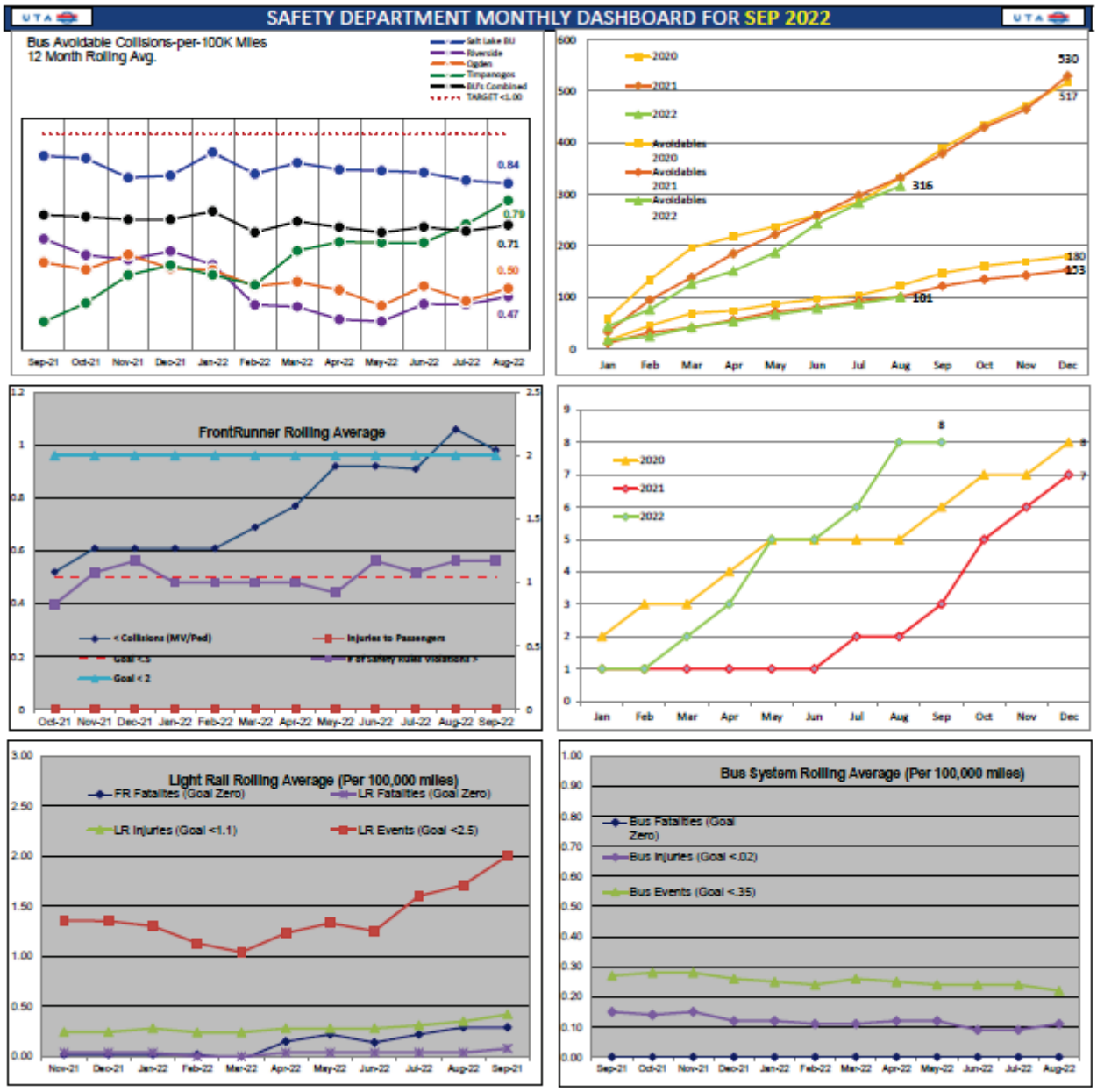
Metric	Direct	Indirect	Total	%
Courses Needed	80		80	-
Courses in service	34		34	43%
Courses needing update	16		16	20%
Courses in Development	2		2	3%
Courses not available	27		27	34%

Direct: Mgd by Safety Dept.
Indirect: Mgd by Local Training

Construction	% Complet	Lost Time	Recordable	First Aid /mo
Depot Distict	1%	0	0	0
7200 S. Bridge	103%	0	0	0
S-Line Double Track	97%	0	0	0
PTC	87%	0	0	0
Main St/4th S Interlocking	30%	0	0	0

partments\SAFETY Department\ADMIN\Dashboard\UTA Safety Dashboard 2022

A-2: Collisions/Injuries Rolling Average Index (Sample)



A-3: INTERNAL AUDIT INSPECTION CHECKLISTS AND SCHEDULE (SAMPLE)

TASP # 1: Authority and Policy Statement

TASP # 1: Goal and Objectives Table

A policy statement signed by the agency's chief executive that endorses the safety program and describes the authority that establishes the TASP

VERIFICATION METHOD	RECOMMENDED ACTIVITIES	COMPLIANT YES/NO	COMMENTS
Document Review	**Review TASP Policy Statement, ensuring:** • That it endorses UTA's safety program; that it has the signature of UTAs General Manager (GM, Executive Director (ED), or Chief Executive Officer (CEO); that it describes the authority that establishes the TASP; and that it is dated.		
Rules Review	n.a.		
Records Review	n.a.		
Interviews with UTAs Senior Management	**Conduct a meeting with UTAs Executive Director, Director of Safety, and Senior Management in Operations, Maintenance, Engineering, Human Resources/Training, Procurement, and Legal to discuss:** • How the authority conferred in UTA's policy statement to the Safety Department is reinforced with UTA personnel during meetings, bulletins, or other methods. • How the UTA's safety policy is consistent with the commitment to safety expressed by UTA's ED and UTA Senior Management. • Whether safety is included as a regular topic at UTA Board Meetings, and whether the UTA Director of Safety gives reports. • Formal meetings that are held and attended by UTA Executive Leadership to discuss safety performance (such as ongoing evaluation of goals and targets).		

TASP # 1: Goal and Objectives Table

A policy statement signed by the agency's chief executive that endorses the safety program and describes the authority that establishes the TASP

VERIFICATION METHOD	RECOMMENDED ACTIVITIES	COMPLIANT YES/NO	COMMENTS
	• UTA ED and UTA Senior Management awareness of high priority safety issues and the status of corrective actions. • The UTA Safety Department's reporting relationship to UTA ED, UTA's Safety Committee Structure, and the participation of the UTA's Senior Management in this structure. • Where in the organization safety decisions are made and the involvement of UTA Senior Management in making them. • The process for the periodic review of the resources devoted to safety by the ED and UTA Senior Management. • The inclusion of safety activities and requirements in employee job descriptions and training programs at UTA. • The inclusion of safety responsibilities in job evaluations for managers, supervisors, and employees. • The implementation of UTA's internal safety audit process, to include a clearly defined scope, checklists, procedures, an effective findings resolution process, and annual certification of the TASP compliance from the UTA ED. • Use of risk assessment and hazard management as part of the overall safety program. • Efficiency and proficiency testing programs for operations and maintenance employees, and how these programs ensure compliance with safety-critical rules. • UTA's accident investigation program and its focus on cause finding and correction.		

TASP # 1: Goal and Objectives Table

A policy statement signed by the agency's chief executive that endorses the safety program and describes the authority that establishes the TASP

VERIFICATION METHOD	RECOMMENDED ACTIVITIES	COMPLIANT YES/NO	COMMENTS
Interviews with UTA Safety Personnel	**Interview the Director of Safety and representatives from the Safety Department to see if they feel empowered, authorized, and supported by Executive Management in carrying out the TASP, as specified in the Policy Statement.** • Ask for three (3) examples of where management support has made the difference in getting a specific safety concern addressed.		
Interviews with Other UTA Personnel	**Conduct interviews with a representative sample of rank-and-file UTA operations and maintenance personnel to verify their familiarity with the TASP, UTA's safety programs and authorities, and their obligation to perform work safely and to report safety issues and potential hazards.**		
Field Observations	n.a.		
Inspections and Measurements	n.a.		

Audit Date:
Auditor:
Participants

Audit Location:
Auditor:
Title/Company

Findings of Non-Compliance:

Findings of Compliance with Recommendations:

Notes:

Reference: 49 CFR Part 673 Public Transpiration Agency Safety Plans

A-4: FACILITY PM INSPECTION CHECKLIST (SAMPLE)

Meadowbrook

Unit	Description	ServiceType	Scheduled Date	Inspection Date	Status	WorkOrder
100000	Meadowbrook Facility Yard	MONTHLY	02/01/2012	02/29/2012	On Time	798434
111010	RUPS EMERGENCY GENERATOR	MONTHLY	02/01/2012	02/07/2012	On Time	798489
130007	Parallelogram Platform Hoist	MONTHLY	02/01/2012	02/28/2012	On Time	798507
130310	EMERG.GENERATOR	MONTHLY	02/01/2012	02/07/2012	On Time	798508
130340	HYDRA RESERVOIR & PUMP	MONTHLY	02/01/2012	02/28/2012	On Time	798509
130350	HYDRA RESERVOIR & PUMP	MONTHLY	02/01/2012	02/28/2012	On Time	798510
130360	HYDRA RESERVOIR & PUMP	MONTHLY	02/01/2012	02/28/2012	On Time	798511
130440	SUMP PUMP	MONTHLY	02/01/2012	02/29/2012	On Time	798512
130450	SUMP PUMP	MONTHLY	02/01/2012	02/28/2012	On Time	798513
130460	ENGINE COOLANT PUMP	MONTHLY	02/01/2012	02/28/2012	On Time	798514
130470	AUTO TRANS FLUID PUMP	MONTHLY	02/01/2012	02/28/2012	On Time	798515
130490	DIFF.OIL PUMP	MONTHLY	02/01/2012	02/28/2012	On Time	798516
130500	ENGINE OIL PUMP	MONTHLY	02/01/2012	02/28/2012	On Time	798517
131970	Cathodic Protection Rectifier	MONTHLY	02/01/2012	02/28/2012	On Time	798520
132660	Rotary Screw Air Compressor	MONTHLY	02/01/2012	02/28/2012	On Time	798521
132760	Bus Hoist (above ground post)	MONTHLY	02/01/2012	02/28/2012	On Time	798523
132770	Bus Hoist (above ground post)	MONTHLY	02/01/2012	02/28/2012	On Time	798524
132780	Bus Hoist (above ground hoist)	MONTHLY	02/01/2012	02/28/2012	On Time	798525
140050	DIESEL PUMP 1A	MONTHLY	02/01/2012	02/14/2012	On Time	798527
140070	DIESEL PUMP 1B	MONTHLY	02/01/2012	02/14/2012	On Time	798529
140090	DIESEL PUMP 1C	MONTHLY	02/01/2012	02/14/2012	On Time	798531
140120	Diesel Dispenser	MONTHLY	02/01/2012	02/28/2012	On Time	798533
140140	UNLEADED PUMP2B	MONTHLY	02/01/2012	02/28/2012	On Time	798535
140810	Cathodic Protection Rectifier	MONTHLY	02/01/2012	02/28/2012	On Time	798541
140820	Soap Pump and Mixer	MONTHLY	02/01/2012	02/28/2012	On Time	798542
150001	Platform Lift	MONTHLY	02/01/2012	02/28/2012	On Time	798544
150130	SUMP PUMP	MONTHLY	02/01/2012	02/14/2012	On Time	798545
150190	BRUSH ARM ASSEM	MONTHLY	02/01/2012	02/28/2012	On Time	798546
150200	MOP GEAR MOTOR	MONTHLY	02/01/2012	02/28/2012	On Time	798547
150210	WATER PUMP	MONTHLY	02/01/2012	02/14/2012	On Time	798548
150220	WATER PUMP	MONTHLY	02/01/2012	02/14/2012	On Time	798549
150300	WATER RECLAIM PUMP	MONTHLY	02/01/2012	02/28/2012	On Time	798551
150400	PARALLELOGRAM LIFT	MONTHLY	02/01/2012	02/29/2012	On Time	798552
150630	Hot Water Pressure Washer	MONTHLY	02/01/2012	02/28/2012	On Time	798553
150850	Parallel Lift	MONTHLY	02/01/2012	02/28/2012	On Time	798554
160120	Canopy A Nrth Blk Reels/Lights	MONTHLY	02/01/2012	02/28/2012	On Time	798556
160130	Canopy A South Blk Reels/Light	MONTHLY	02/01/2012	02/28/2012	On Time	798557
160140	Canopy B Nrth Blk Reels/Lights	MONTHLY	02/01/2012	02/28/2012	On Time	798558
160150	Canopy B South Blk Reels/Light	MONTHLY	02/01/2012	02/28/2012	On Time	798559
160160	Canopy C Nrth Blk Reels/Lights	MONTHLY	02/01/2012	02/28/2012	On Time	798560
160170	Canopy C South Blk Reels/Light	MONTHLY	02/01/2012	02/28/2012	On Time	798561
160180	Canopy D Nrth Blk Reels/Lights	MONTHLY	02/01/2012	02/28/2012	On Time	798562
160190	Canopy D South Blk Reels/Light	MONTHLY	02/01/2012	02/28/2012	On Time	798563
160200	Canopy E Nrth Blk Reels/Lights	MONTHLY	02/01/2012	02/28/2012	On Time	798564
160210	Canopy E South Blk Reels/Light	MONTHLY	02/01/2012	02/28/2012	On Time	798565
170001	Emergency Generator	MONTHLY	02/01/2012	02/07/2012	On Time	798567
180730	AMER. CLEANER STEAM CLEANE	MONTHLY	02/01/2012	02/10/2012	On Time	798582
180740	L & A STEAM CLEANER	MONTHLY	02/01/2012	02/10/2012	On Time	798583
180870	WATER SOFTENER	MONTHLY	02/01/2012	02/28/2012	On Time	798585
180880	WATER SOFTENER	MONTHLY	02/01/2012	02/28/2012	On Time	798586
182250	AIR DRYER	MONTHLY	02/01/2012	02/14/2012	On Time	798600
183250	Oil Water Separator	MONTHLY	02/01/2012	02/28/2012	On Time	798604
183280	Hunter Scissor Lift	MONTHLY	02/01/2012	02/28/2012	On Time	798605
183970	Parts Washer	MONTHLY	02/01/2012	02/10/2012	On Time	798609

Inspection Summary:

Total Inspections:	54	
Total Overdue Inspections:	0	0.00%
Total Inspections Completed Late:	0	0.00%
Total Inspections Completed Early:	0	0.00%
Total Inspections Completed on Time:	54	100.00%
Total Inspections Due this Current Month that have not been Completed Yet:	0	0.00%

Early: Any inspections done in the months previous to when they were scheduled to be done.
Late: Any inspections done in the months after they were scheduled to be done.
On time: Any Inspections done within the same month they were scheduled.

A-5: MONTHLY SAFETY ENVIRONMENTAL CHECK LIST (SAMPLE)

Monthly Facility and Shop Inspection Checklist
- Correct Unsafe Conditions Immediately -

Revision Date 10/21/2013
Revision number 1

Date:

= Not applicable = Not required (note comment if issue is found)

Safety Administrator: Name:
Signature:
Maintenance Safety Rep: Name:
Signature:

Satisfactory or Unsatisfactory

	Bay 1	Bay 2	Bay 3	Bay 4	Bay 5	Bay 6	Bay 7	Bay 8	Bay 9	M. Shop	Parts	Paint B
1. Are Floors Clean/Clear of Debris?	S	S	S									
2. Are Blue Flag Chains serviceable at both ends of the bay?	S	S	S									
3. Are fire extinguishers readily available? Check two for current insp.	S	S	S									
4. Does overhead lighting properly work?	1	S	S									
5. Are hoses and equipment properly stored?	S	2	S									
6. Are containers properly stored and labeled?	S	S	3									
7. Are Safety glass area lines visible and in good condition?	S	S	S									
8. Are compressed gas cylinders properly strored? (Chained)			S									
9. Are Safety Chains in place?		S	S									
10. Are pits clear of rags, trash and other debris		S	S									
11. Are Bio-Hazard kits available and properly stocked?	S											
12. Are Face Shields available for blow down pit?		S										
13. Are Safety Chains in place around Wheel truing pit?			S									
14. Are pit fans in working order (Check 3 random fans)												
15. Is the oil storage area free of slip hazards?												
16. Do eye wash stations / showers have current inspection?			S									
17. Is the spill kit available and properly stocked?												
18. Are Safety Glasses, gloves and respirators available												
19. Are Cranes Inspected prior to use? Are inspections current?			S									
20. Are safety guards in place?												

Findings/comments:

1. Several Lights are out. Work order needs to be placed
2. Hoses were strung out across bay 2 no employees in area
3. Containers in cleaning area were unlabled.

Note: Customize location and area to be inspected to make it specific to your facility

Appendix B: BLANK FORMS

B-1: NON-CONFORMANCE CORRECTIVE ACTION PLAN (NCAP) FORM

Accountable Manager/Owner: *Click here to enter text.*		**Corrective Action Plan #:** *Click here to enter text.*
Category: *Choose an item.*	**Issue Identified by:** *Choose an item.*	**IHR:** *Enter Initial Hazard Rating.*
Location: *Click here to enter text.*	**Department:** *Enter responsible Dep.*	**FHR:** *Enter Final Hazard Rating.*
Assigned to: *Click here to enter text.*	**Date Assigned:** *Click here to enter a date.*	

Description of Non-Conformance/Safety Hazard:
Click here to enter text. Provide a detailed description of the Non-Conformity or safety hazard.

Root Cause Analysis:
Click here to enter text. Provide information regarding cause or contributing factors (If applicable).

Corrective Action Plan:
Click here to enter text. Provide a detailed plan and/or list of corrective actions.
Proposed Implementation Date: *Click here to enter a date.*
Corrective Action Plan Initial Approval by UDOT SSO: *Click here to enter a date.*

Resolution Of Corrective Action Plan:
Click here to enter text. Provide a detailed description of actions implemented.

Accountable Manager/Owner:	**Sign and date below when CAP been completed and documented.**	
Name: *Click here to enter text.*	**Date:** *Click here to enter a date.*	**Signature:**

SSO Manager: *(If Applicable)*	**CAP Verification and Final Approval (Actual Implementation Date)**	
Name: James W. Golden	**Date:**	**Signature:**

B-2: SAFETY SUGGESTION/HAZARD REPORT FORM

Use this form for safety questions, suggestions and reporting hazards. Your Supervisor will respond to your suggestions or forward it to your UTA Safety Committee. The Safety Committee will meet monthly to address these issues and provide feedback as soon as possible. Please be as specific as possible when describing the safety concern and making recommendations

Name: Date:

(Not required unless you want feedback)

Bus/Rail route or Facility: _____ Direction: _____ Time: _____

Safety Question, Suggestion, or Hazard: *(Be as specific as possible)*

_____

_____

_____

_____

_____

Proposed Solution: *(Be as specific as possible)*

_____

_____

_____

_____

Response:

_____

_____

_____

_____

Would you like a response? Yes: [ ] No: [ ]

Supervisors Initials: _____ Date Received:_____ Response Date: _____

Suggestion forwarded to: _____ Forward Date: _____

Person or Committee responding: _____ Response Date: _____

Reviewed by RGM: _____ Date Reviewed: _____

Date Closed:_____

UTA **Certifiable Element:** Revenue Readiness **Sub-element:** Fire, Safety and Security Documents and Training	**Safety and Security Certification** **Certifiable Items Checklist**	**Verification:**_____ **Date:**_____

Location	Means of Verification			Status
Discipline: Revenue Readiness Contract No: Site/Area: Sugar House Street Car	Construction CM= Measurement CT= Test CV= Visual Inspection	Design PS= Plans and Specifications S= Submittal CN/CO= Change Notice/Order	Commissioning T= Test V= Visual Inspection R=Review	C= Closed O= Open O/W= Open with identified workaround

Item No.	Certifiable Item Description	Certifiable Item Verification				Certifiable Item Status	
		Reference Documentation (As applicable)	Verified By	Date	Means of Verification	Status	Description of Workaround
1	Fire protection & Alarm systems, (Facilities)	Local FD jurisdiction site review			T, V, R		
2	UTA Emergency Notification & Regulator Notification	SSPP section 10, UTA SOP 4.2.23			V, R		
3	Functional Response Drills	EPP, SSPP Section 11, 49 CFR 659			V, R		
4	Table Top Response Drills	EPP, SSPP Section 11, 49 CFR 659			V, R		
5	Emergency Prepredness Plan (EPP) Review	EPP, 49 CFR 659					
6	System Safety Program Plan (SSPP) Review	49 CFR 659, SSO Procedures/Stds.			R		
7	System Security Plan (SSP) Review	SSP, 49 CFR 659 Security Haz Log			R		
8	Vehicle familiarization orientation (FD, PD, SWAT)	Familiarization Training			V, R		
9	Emergency Response Evacuation (Facilities)	EPP, 49 CFR 659,			R		
10	Threat and Vulnerability Analysis (TVA)	SSP, 49 CFR 659					
11	Preliminary Hazard Analysis (PHA)	SSPP section 6, 8, SSCP, RAP			R		
12	Operations Hazard Analysis (OHA)	SSPP section 6, 8, SSCP, RAP			R		
13	Hold Points 1,2 ,3 process review and verification	SSPP Section 8, RAP, SSCP			R		
14							

Note: Only list items which are safety and\or security critical

B-4: UTA Safety Certification Hold Point Approval Forms

See following pages for hold point forms 1, 2, and 3.

System Integration Readiness Review Report

Hold Point #1

Project: _____

This Hold Point Review is established to verify readiness to enter the System Integration Commissioning/Testing Phase of the project. Essential pre-requisites are listed herein, along with signatures indicating both thorough review of the project in its current state and approval to move on to the next phase of commissioning.

System Integration Testing Phase Pre-requisites

[ ] 1. Appropriate Civil, GC, Systems CILs complete (see items identified on attached index).
[ ] 2. Appropriate Contractor Stand Alone Testing complete (see items identified on attached index).
[ ] 3. UDOT Surveillance Reports completed and deficiencies corrected.
[ ] 4. Public Awareness Safety Outreach Plan measures started and ongoing.
[ ] 5. Preliminary Hazard Analysis completed/ Hazards mitigated.
[ ] 6. TVA completed.
[ ] 7. Rail Corridor ready for System Integration.

Areas/Integration Zones under review:

_____

Approved Open Items, Areas and/or Hazards, with approved workaround:
(Describe below, include responsible party).

1. _____
2. _____
3. _____
4. _____

The undersigned, by signature, indicate that they have reviewed all information applicable to the Project/Areas listed above, and recommend that these areas are ready for System Integration testing.

_____ _____

Operations Discipline Mgr. – Carolyn Anderson Date

Systems Discipline Mgr. – Jared Scarbrough Date

_____ _____

Safety Discipline Mgr. – Travis Shingleton Date

Civil Discipline Mgr. – Grey Turner Date

_____

Dir. of Safety and Security – Sheldon Shaw Date

System Integration Readiness Review Report

Hold Point #2

Project: _____

This Hold Point Review is established to verify readiness to enter the Pre-Revenue Commissioning/Testing Phase of the project. Essential pre-requisites are listed herein, along with signatures indicating both thorough review of the project in its current state and approval to move on to the next phase of commissioning.

System Integration Testing Phase Pre-requisites

[ ] 1. Grade Crossing CILs Complete.
[ ] 2. Systems CILs Complete.
[ ] 3. System Integration Testing and Documentation Complete.
[ ] 4. Operational Hazard Analysis Complete.
[ ] 5. Transfer of permitting process (Track Access) from Contractor to UTA Operations Complete.

Areas/Integration Zones under review:

_____

Approved Open Items, Areas and/or Hazards, with approved workaround:
(Describe below, include responsible party).

5. _____
6. _____
7. _____
8. _____

The undersigned, by signature, indicate that they have reviewed all information applicable to the Project/Areas listed above, and recommend that these areas are ready for System Integration testing.

_____ _____
Operations Discipline Mgr. – Carolyn Anderson Date Systems Discipline Mgr. – Jared Scarbrough Date

_____ _____
Safety Discipline Mgr. – Travis Shingleton Date Civil Discipline Mgr. – Grey Turner Date

_____
Dir. of Safety and Security – Sheldon Shaw Date

System Integration Readiness Review Report

Hold Point #3

Project: _____

This Hold Point Review is established to verify readiness to enter the Revenue Operations Phase of the project. Essential pre-requisites are listed herein, along with signatures indicating both thorough review of the project in its current state and approval to move on to the next phase of commissioning.

System Integration Testing Phase Pre-requisites

[ ] 1. Previous Hold Point Review Documents are signed and complete.
[ ] 2. CILs are complete, with any workarounds noted, approved, and implemented.
[ ] 3. Pre-Revenue operator training/testing/drills, Pre-Revenue Operations are complete.
[ ] 4. Grand Opening Plan and Public Outreach Plan developed.
[ ] 5. Agency Reviews completed and notifications given.
[ ] 6. Safety & Security Certification Verification Report (SSCVR) is finished and ready to submit.

Areas/Integration Zones under review:

_____

Approved Open Items, Areas and/or Hazards, with approved workaround:
(Describe below, include responsible party).

9. _____
10. _____
11. _____
12. _____

The undersigned, by signature, indicate that they have reviewed all information applicable to the Project/Areas listed above, and recommend that these areas are ready for System Integration testing.

Operations Discipline Mgr. – Carolyn Anderson Date	Systems Discipline Mgr. – Jared Scarbrough Date
Safety Discipline Mgr. – Travis Shingleton Date	Civil Discipline Mgr. – Grey Turner Date
Dir. of Safety and Security – Sheldon Shaw Date	Executive Director Date

B-5: MANAGEMENT OF CHANGE (MOC) APPROVAL AND VERIFICATION DOCUMENT

Title:	MOC #:	Date Initiated:
Team Lead/Members:		
Description:		
Evaluation/Solutions:		
Recommendation:		
Cost/Funding Source/Schedule/POC :		
Proposed changes to existing Design Criteria/Specs/Procedures:		
Enclosures/Drawings/Photos/Attachments:		

CONCURRENCE

The following UTA staff have reviewed the evaluation and concur with the recommended modifications.

Name	**Position**	**Signature**	**Date**
Comments / Provisions:			

APPROVAL

Indicates approval "to go do". Requires signatures from any two SSRC members.

Name	**Position**	**Signature**	**Date**
SSRC Date:			
Comments / Provisions:			

COMPLETION VERIFICATION

Enclosures:	[ ] Photos	[ ] Drawings	[ ] Specifications	[ ] Other:
As Built Plans	Dated:	Copy to:	Name:	Signature:

Design Criteria updated?*	[ ] Yes [ ] No	If yes, Date:

**If yes, copy must be provided.*

ACCEPTANCE

Work is completed and accepted. Requires signatures from any two SSRC members.

Name	**Position**	**Signature**	**Date**

SSRC Date:			

B-6: SAFETY DEPARTMENT INVESTIGATION FORM

SAFETY INVESTIGATION FORM

Report #: Enter #

NTD Reportable: Yes/No/NA

BASIC INFORMATION

Date of Incident: enter date	**Time:** enter time AM or PM	**Location:** enter text
Report type: Choose an item	**Investigation type:** Choose an item	**GPS Coordinates:**
Mode: Choose an item	**Train/Bus #:** enter text	**DOT Crossing #:** enter text
Op./Emp. #: enter text	**Vehicle ID's:** enter text	**# of Cars in Consist:**

Weather Conditions: Clear/Cloudy, (Rain/Snow), (Wind), (Temperature)

NOTIFICATIONS

SSO Notified: Yes/No/NA Enter date/time	**OSHA Notified:** Yes/No/NA	**FRA Territory:** Yes/No/NA

National Response Center (NTSB/FRA Notified): Yes/No/NA **Case #:** Enter NRC Case # here.

Transportation Operations Center (FTA Notified): Yes/No/NA ; Choose an item.

EVENT SUMMARY

Description of Event:

Provide a detailed description of the incident, including a clear sequence of events.

INVESTIGATION

# of Fatalities: Select #	**# of Serious Injuries:** Select #	**# of Other Injuries:** Select #	**# Pass on Transit:** Select #	**# Pass in POV:** Select #

Were vehicles towed from the scene due to disabling damages: Yes/No/NA

Damages to POV Veh ($):enter text	**Damages to Transit Veh ($):** enter text	**Total Damages ($):** enter text

Accident Evaluation Group Held? Yes/No/NA	**AEG Members:** enter text

Give a brief review of outcomes resulting from AEG: enter text

Corrective Action Plan: Enter the Corrective Action Plan (CAP) number.

FACTORS

1. Communication:		**7. Ped Treatments:**		**13. Weather Conditions:**	
2. Crossing Operation:		**8. Rules/Policies:**		**14. Work Environment:**	
3. Drug/Alcohol Use:		**9. Sight Lines:**		**15. Distracted Behavior:**	
4. Fatigue Management:		**10. Train Functionality:**		**16. Failure to Yield:**	
5. Lighting:		**11. Vehicle Speeds:**		**17. Medical Condition:**	
6. Location History:		**12. Warning Signage:**		**18. Other:**	

Give brief explanation of any contributing factors:

Enter text

DOCUMENTATION

UTA Police Report:		**Radio Recordings:**		**Vehicle Recorder Download:**	
External Police Report:		**Video Recordings:**		**Grade Crossing Download:**	
Medical Examiners report:		**Scene Photos:**		**Damage Estimates:**	
Employee Green Sheet:		**Controller Log:**		**Maintenance Records:**	
Supervisors Report:		**Drug/Alcohol Testing:**		**Operator Certification:**	
Witness Statements:		**Bulletins/Orders:**		**HOS of Service:**	
Measurements:		**Employee History:**		**Employee Injury Report:**	

Documentation Notes or Explanations:

Enter text

INICIDENT DIAGRAM

Report compiled by: (Safety)	Name: Enter text here.	Date: Select Date	Signature:
Report Adopted by: (UDOT SSO)	Name: James W. Golden	Date:	Signature:

B-7: TRAX SUPERVISOR'S ACCIDENT/INCIDENT REPORT FORM

Property #3			
Owner Name:	H Phone:	W Phone:	
Address:	City:	State:	Zip:
Describe Property:			
Extent of Damage:			
If the damaged property was a vehicle, was it towed?			

Number of Injured Parties:				
Injured #1				
Name:		H Phone:	W Phone:	
Address:		City:	State:	Zip:
Injured person was:(check one)		Driver (veh #)	Passenger (veh #)	Pedestrian
Sex:	DOB:	Transported:	If yes, where:	
Nature of the Injuries:				
Injured #2				
Name:		H Phone:	W Phone:	
Address:		City:	State:	Zip:
Injured person was:(check one)		Driver (veh #)	Passenger (veh #)	Pedestrian
Sex:	DOB:	Transported:	If yes, where:	
Nature of the Injuries:				
Injured #3				
Name:		H Phone:	W Phone:	
Address:		City:	State:	Zip:
Injured person was:(check one)		Driver (veh #)	Passenger (veh #)	Pedestrian
Sex:	DOB:	Transported:	If yes, where:	
Nature of the Injuries:				

Number of Witnesses:			
Witness #1			
Owner Name:	H Phone:	W Phone:	
Address:	City:	State:	Zip:
Witnesses Statement:			
Witness #2			
Owner Name:	H Phone:	W Phone:	
Address:	City:	State:	Zip:
Witnesses Statement:			
Witness #3			
Owner Name:	H Phone:	W Phone:	
Address:	City:	State:	Zip:
Witnesses Statement:			

First Report of Injury-			
Supervisor:		Date:	Time:
Drug Testing –			
Supervisor:			
Drug test ordered:	Type of test:	Date ordered:	Time ordered
Alcohol test done within 2 hours after accident?		If no, why not:	

Description of Accident/Incident (all items **must** be completed)			
Estimated Train speed:	Posted Speed:	Timetable Direction:	
Weather Conditions:	Road Surface Conditions:	Track Conditions:	
Light Conditions:			
Train was:	Vehicle #2 was:	Vehicle #3 was:	
Traffic Controls:	Last RailService signal : - if stop indication, was bypass authorized:	:	

Narratives	
Supervisors' Findings:	
Probable Cause:	

Accident/Incident Report Form

(Complete ALL fields)

Claim #: OFFICE USE ONLY | IF | LIAB | SUBRO | AL | FP | GL | ARC | RO | Cause Code:

TRANSIT VEHICLE INFORMATION

(Vehicle #1)

Camera Activation:
Did you manually activate the security camera? ☐ YES ☐ NO ☐ N/A explain:

Employee name:		Cell #:	Badge #:	
Employee's Supervisor:	Scene Supervisor:		Division:	
Accident Date:	Time:	TCC Notified: ☐ YES ☐ NO	Location:	City:
UTA Vehicle/Train #:	Block #:	Route/Run #:	# of Passengers:	# of Courtesy Cards:

Describe Damage to UTA Property:

POLICE INVESTIGATION

Police Investigation: Yes No	If no police investigation please explain why:
Police Department:	Case #: / Citation: Yes No
Officer's name:	To whom was citation issued:

OTHER VEHICLE INFORMATION

Vehicle #2	Vehicle #3
Driver Information Name: / Phone:	**Driver Information** Name: / Phone:
Address:	Address:
City: / State: / Zip:	City: / State: / Zip:
DL #: / State:	DL #: / State:
Insurer: / Policy #:	Insurer: / Policy #:
Vehicle Information / Plate #: / State:	**Vehicle Information** / Plate #: / State:
Year: / Make: / Model: / Color:	Year: / Make: / Model: / Color:
Owner Information Name: / Phone:	**Owner Information** Name: / Phone:
Address:	Address:
City: / State: / Zip:	City: / State: / Zip:
Describe Damage:	Describe Damage:

INJURY INFORMATION

Injured #1	Injured #2
Name: / Phone:	Name: / Phone:
Address:	Address:
City: / State: / Zip:	City: / State: / Zip:
CHECK ONE (indicate vehicle #) ☐ Driver (Veh #) ☐ Passenger (Veh #) ☐ Pedestrian	CHECK ONE (indicate vehicle #) ☐ Driver (Veh #) ☐ Passenger (Veh #) ☐ Pedestrian
Describe injury:	Describe injury:
Transported by ambulance: Yes No / Where:	Transported by ambulance: Yes No / Where:
If a UTA passenger he/she was: ☐ Boarding ☐ Alighting ☐ Standing ☐ Sitting	If a UTA passenger he/she was: ☐ Boarding ☐ Alighting ☐ Standing ☐ Sitting

PROPERTY DAMAGE INFORMATION - (other than vehicles)

Owner's Name: / Phone:	Describe the property and damage:
Address:	
City: / State: / Zip:	

Recommendations:	

Describe UTA Vehicle Damage:

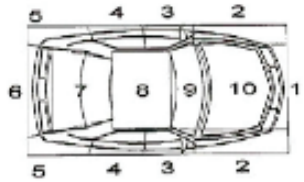
Accident Classifications - ☑ Check if applicable

If damage does not meet one of the criteria below – describe here:

Property Damage

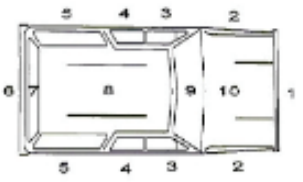
Enter the vehicle number in each applicable zone of damage using the zone key for the type of vehicle.

Passenger Vehicle



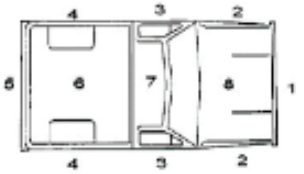
1	2	3	4	5	6	7	8	9	10
Bumper, Headlights, Grill	Fender, Wheel	Door, Glass, Pillar	Door, Glass, Pillar	Quarter Panel, Wheel	Bumper, Tail lights, Rear panel	Trunk, Floor Pan, Rear Glass	Roof	Windshield	Hood
15	6	11	11	12	13	15	6	8	3

Sport Utility Vehicle



1	2	3	4	5	6	7	8	9	10
Bumper, Headlights, Grill	Fender, Wheel	Door, Glass, Pillar	Door, Glass, Pillar	Quarter Panel, Wheel	Bumper, Tail lights, Rear panel	Trunk, Floor Pan, Rear Glass	Roof	Windshield	Hood
20	5	14	14	16	6	10	8	2	5

Pickup Truck



1	2	3	4	5	6	7	8
Bumper, Headlights, Grill	Fender, Wheel	Door, Glass, Pillars	Bedside, Wheel, Front Panel	Bumper, Tail lights, Rear panel	Inner Bed	Roof, Rear glass, Back panel	Hood, Cowl
19	9	20	12	11	8	12	9

Personal Injury

Put in the number of persons injured under each classification	Other Vehicle Passenger/Driver	UTA Passenger	Pedestrian
Class A: Bruising, Abrasions, Minor to Moderate Bleeding, Sprains and Strains:			
Class B: Unconsciousness, Fractures, Severe Bleeding:			
Class C: Death, Paralysis, Dismemberment:			
Totals:			

Accident Diagram

B-8: BUS SUPERVISORS ACCIDENT/INCIDENT REPORT FORM

Accident/Incident Report Form

(Complete ALL fields)

Claim #:
ARC | RO
Cause Code:

OFFICE USE ONLY

IF	LIAB	SUBRO
AL	FP	GL

TRANSIT VEHICLE INFORMATION

(Vehicle #1)

Operator name:				Badge #:
Supervisor:			Scene Supervisor:	
Accident Date:	Military Time of accident: / Military Time reported:	Location:		City:
UTA Vehicle #:	Block #:	Route #:	# of Passengers:	# of Courtesy Cards:

Check Division	Operations	☐ 21 MBK	☐ 22 TIMP	☐ 23 MT OGD	☐ 24 CNTL	☐ 29 RVRS	☐ TRAX	☐ OTHER
	Maintenance	☐ 31 MBK	☐ 32 TIMP	☐ 33 MT OGD	☐ 34 CNTL	☐ 39 RVRS	☐ TRAX	

Describe Damage to UTA Property:

POLICE INVESTIGATION

Police Investigation: Yes No	Police Department:	Case #:	Citation: Yes No
Officer's name:	To whom was citation issued:		

OTHER VEHICLE INFORMATION

Vehicle #2				Vehicle #3			
Driver Information Name:			Phone:	**Driver Information** Name:			Phone:
Address:				Address:			
City:	State:		Zip:	City:	State:		Zip:
DL #:			State:	DL #:			State:
Insurer:		Policy #:		Insurer:		Policy #:	
Vehicle Information	Plate #:		State:	**Vehicle Information**	Plate #:		State:
Year: Make:	Model:		Color:	Year: Make:	Model:		Color:
Owner Information Name:			Phone:	**Owner Information** Name:			Phone:
Address:				Address:			
City:	State:		Zip:	City:	State:		Zip:
Describe Damage:				Describe Damage:			

INJURY INFORMATION

Injured #1			Injured #2		
Name:		Phone:	Name:		Phone:
Address:			Address:		
City:	State:	Zip:	City:	State:	Zip:
CHECK ONE (indicate vehicle #) ☐ Driver (Veh #) ☐ Passenger (Veh #) ☐ Pedestrian			CHECK ONE (indicate vehicle #) ☐ Driver (Veh #) ☐ Passenger (Veh #) ☐ Pedestrian		
Describe injury:			Describe injury:		
Transported by ambulance: Yes No	Where:		Transported by ambulance: Yes No	Where:	
If a UTA passenger he/she was: ☐ Boarding ☐ Alighting ☐ Standing ☐ Sitting			If a UTA passenger he/she was: ☐ Boarding ☐ Alighting ☐ Standing ☐ Sitting		
If a UTA passenger was he/she carrying anything: Yes No			If a UTA passenger was he/she carrying anything: Yes No		
If yes, what?			If yes, what:		

PROPERTY DAMAGE INFORMATION - (other than vehicles)

Owner's Name:		Phone:	Describe the property and damage:
Address:			
City:	State:	Zip:	

DESCRIPTION OF ACCIDENT/INCIDENT

Weather Conditions:	clear	cloudy	raining (light	heavy)	snowing (light	heavy)	fog (light	heavy)	
Road Surface Conditions:	dry	wet	muddy	snowy	icy	oily	other:		
Light Conditions:	daylight	dawn or dusk	darkness (street lights)	darkness (no street lights)					
Bus was:	stopped	stopping	starting	changing lanes	moving to curb	moving from curb	turning left	turning right	going straight
Vehicle #2 was:	stopped	stopping	starting	changing lanes	moving to curb	moving from curb	turning left	turning right	going straight
Vehicle #3 was:	stopped	stopping	starting	changing lanes	moving to curb	moving from curb	turning left	turning right	going straight
Traffic Controls:	traffic signal	stop sign	yield sign	police officer	none	other:			

What happened:

(Attach a separate sheet if more room is needed)

ACCIDENT DIAGRAM

Vehicle	Bus #1	#2	#3
Travel Speed			
Posted Speed			

Indicate North with an arrow in the circle.

Employee Signature:		Date:
Dispatcher/Supervisor Signature: **This form has been completed correctly.**	Time:	Date:

B-9: EMPLOYEE ACCIDENT /INCIDENT REPORT FORM PAGE

UTA - EMPLOYEE'S FIRST REPORT OF INJURY

THIS REPORT MUST BE FILLED OUT COMPLETELY AND SIGNED BY THE INJURED EMPLOYEE IMMEDIATELY AFTER AN INJURY. FAILURE TO PROPERLY COMPLETE THIS FORM MAY RESULT IN DENIAL OF BENEFITS. SUPERVISOR TO IMMEDIATELY GIVE THIS FORM TO THE WORKERS COMPENSATION ADMINISTRATOR, TRICIA MCDONALD, IN THE OFFICE OF GENERAL COUNSEL, CLAIMS UNIT AT MEADOWBROOK, BLDG #1.

I. EMPLOYEE INFORMATION

Name _____ Date of Birth _____

Home Address _____
(number/street) (city) (zip code)

Hm phone # _____ Cell # _____ Social Security # _____ Badge ID # _____

Job Title _____ Average # of Hours worked per week _____ Hourly Wage $_____

Division/Department _____ Direct Supervisor _____

II. DEPENDENT INFORMATION

Name(s) and birth date(s) of spouse and dependents under age 18:

NAME	RELATIONSHIP	BIRTH DATE

III. ACCIDENT INFORMATION

Date of Accident: _____ Hour of Day _____ Time Reported _____ Hour shift began _____

Did you leave work due to accident? _____ If so, give date _____

Have you returned to work? _____ If so, give date _____

Give exact location of accident _____ Bus # _____

Describe accident in detail (how did it happen?) _____

How could this accident have been prevented? _____

IV. INJURY INFORMATION

Describe your injury in detail: _____

Have or will you seek medical care for this injury? _____ Physician or Hospital: _____

Medical treatment received: _____

Next scheduled appointment: _____

COMPLETE OTHER SIDE →

V. PREVIOUS MEDICAL TREATMENT (providing incomplete information may constitute fraud)

Have you injured or had pain/symptoms in this area before? Yes_____ No _____

If yes, please explain: _____

_____

_____

Please list all medical practitioners or facilities previously involved with treatment of this area. _____

_____

_____

VI. EMPLOYEE SIGNATURE

WORKERS'S COMPENSATION INFORMATION

- **"Any person who knowingly presents false or fraudulent underwriting information, files or causes to be filed a false or fraudulent claim for disability compensation or medical benefits, or submits a false or fraudulent report or billing for health care fees or other professional services is guilty of a crime and may be subject to fines and confinement in state prison."**
- The first three days of lost time for an on-the-job injury are not compensated unless you are off duty more than two weeks. You may use accrued sick leave or vacation time for those first three days.
- If your doctor releases you to modified or light duty, and modified or light duty is available, acceptance is mandatory. Failure to accept light duty will result in loss of compensation benefits.
- It is your responsibility to contact your supervisor and dispatch regularly to let them know of your work status.
- It is your responsibility to make sure your time is properly coded for worker's compensation time, vacations, and holidays. Contact your supervisor at least weekly.

I have read and understand the above information. The information I have provided on this form is true and accurate.

Employee signature: _____ Date: _____

VII. SUPERVISOR'S VERIFICATION

I have reviewed this report. I will complete a supervisor's report and submit it to the Office of General Counsel, Claims Unit immediately.

Signature of supervisor verifying the report: _____ Date: _____

QUESTIONS OR CONCERNS ABOUT THIS REPORT SHOULD BE DIRECTED TO TRICIA MCDONALD ext. 2311 OR 287-4534.

B-10: Rail Service Center Safety Checklists/Audit Forms

Forms on the following two pages.

UTA TRAX

Jordan River Rail Service Center, 2264 South 900 West, Salt Lake City, UT 84119

S70 Daily Preventive Maintenance Inspection

Vehicle Number		**Inspection Date**	
Work Order Number		**Mileage**	

WARNING: TO PREVENT SERIOUS INJURY, ALL PERSONNEL DIRECTLY OR INDIRECTLY INVOLVED WITH THE INSPECTION, MAINTENANCE, REPAIR, AND OPERATION OF THESE VEHICLES MUST FOLLOW THE FOLLOWING PRECAUTIONS:

1. Observe all Utah Transit Authority safety rules and regulations.
2. The vehicle must be located in the assigned maintenance area or authorized track.
3. Ensure that the wheels are chocked when working on the brake system.
4. The vehicle must be keyed down, pantograph down and auxiliary off when working on roof or under the vehicle.
5. The catenary power must be removed and low voltage isolated. The stinger and shop track disconnect switch must be locked and red tag when working on roof and when handling equipment electrical connections or when checking electrical continuity.
6. Ensure that the area is well ventilated when working with materials that produce dangerous fumes and wear protective gear when handling materials that are injurious to the skin or eyes.
7. To protect against flying debris, wear protective gear when cleaning using compressed air.
8. When handling heavy components, it is your responsibility to select a lifting apparatus of adequate type and capacity for the weight and size involved.
9. When fasteners removed from car equipment are not satisfactory for re-use, care must be taken to select replacements that match the originals.
10. Follow all WARNINGS, CAUTIONS and NOTES found throughout S70 RUNNING MAINTENANCE MANUAL.

SPECIAL INSTRUCTIONS:

1. Fill in Badge #, Name, Signature, Initial and Date in BLACK or BLUE ink in the space provided below.
2. Fill in initials in BLACK or BLUE ink besides EACH inspection task you completed.
3. Make comments in the space provided at the end of the inspection. Identify the comment to the specific inspection line number.
4. Findings requiring a repair must be reported immediately to the supervisor.
5. Report material shortages to the supervisor.
6. Report damaged or missing tools.
7. Clean up your work area.

Badge #	Inspector's Name	Signature	Initial	Date

Line	Inspection	A-End	B-End
1.	**Check the Headlights and the Railroad Light for proper operation\condition.**	_____	_____
2.	Check the Marker Lights and the Brake\ Tail\ Turn Lights for proper operation and condition.	_____	_____
3.	Check the Vehicle Fault Light (White), the Brakes Status Light (Red), and the Door Status Light (Yellow) for proper operation and condition.	_____	_____
4.	Verify proper operation of the HVAC System.	_____	_____
5.	Verify illumination and proper operation of all Destination signs and Train Number signs.	_____	_____
6.	Verify the Cab Light for proper operation.	_____	_____
7.	Check the Radio for proper operation.	_____	_____
8.	Verify the presence of the Fire Extinguisher.	_____	_____
9.	Check P.A. System, Passenger Intercom System and Automated Message System for proper operation.	_____	_____
10.	Check the VOD Display Function.	_____	_____
11.	Check the camera display for proper operation.	_____	_____
12.	Check if Bypass seals are installed and intact.	_____	_____
13.	Perform a Console Lamp Test.	_____	_____

UTA TRAX

Jordan River Rail Service Center, 2264 South 900 West, Salt Lake City, UT 84119

S70 Daily Preventive Maintenance Inspection

Line	Inspection	A-End	B-End
14.	Verify proper operation of all Cab Pushbuttons and Foot pedals (Including Horn & Gong).	_____	_____
15.	Check the Sanding system for proper operation.	_____	_____
16.	Verify the operation of the Track Brakes.	_____	_____
17.	Verify proper operation and quality of the Windshield Wipers and Washer.	_____	_____
18.	Fill washer reservoir and inspect washer tubing for damage or loose connection to nozzle.	_____	_____
19.	Verify proper operation and illumination of all Doors, Door Pushbuttons, Warning Lights & Buzzer.	_____	_____
20.	Verify all Interior and Exterior Consoles and Panels are secure.	_____	_____
21.	Check the Hand Rails and Stanchions for damage or loose fit.	_____	_____
22.	Check the Passenger Seats and Cushions for missing hardware and cuts or tears. Replace the cushions if necessary.	_____	_____
23.	Check the level of sand in Sand boxes.	_____	_____
24.	Check the Passenger Windows for damages and graffiti.	_____	_____
25.	Check the Passenger Lights for normal operation.	_____	_____
26.	Inspect Coupler's Mechanical and Electrical Head for damage.	_____	_____
27.	Visually Inspect the Wheel-sets for completeness or damage.		

_____ A-truck _____ C-truck _____ B-truck

Vehicle Finding Log:

Item #	Finding	Logged By:		Status (Work Order Number)
		Badge	Initial	

This certifies that light rail vehicle # _____ was inspected and found to present no potential safety hazards. No items requiring repairs for safe operation exist except as noted. Findings found are described in the Vehicle Finding Log.

Supervisor's Signature: _____ Date: _____

Supervisors' Name: _____ Badge #: _____

B-11: ROADWAY WORKER PROTECTION SPOT CHECK FORM

UTA

RWP Spot Check Form

v1.0

Examiner	
Ex. Badge	

Site Information

Date (m/d/yy)		Street Address		*Use full address, or long/lat.*
Time (24h)				

Track Access

RWIC Name		Rail System	[ ] FrontRunner	Permit in Use?	Y / N
RWIC Badge			[ ] Trax	Permit Number	
Description of Work:				Permit Holder	
				Permit Activated/Track Accessed Correctly?	Y / N
				If no, describe:	

On Track Safety Type (Check all that apply)		Exclusive Track Occupancy (check all that apply)	
[ ] Exclusive Track Occupancy	[ ] Inaccessible Track	[ ] Yellow/Red Flag with Form B	[ ] Y/R without Form B
[ ] Individual Train Detection (ITD)	[ ] Flagger	[ ] Track Removed from Service	[ ] Track and Time
[ ] Watchman/Lookout		[ ] Train Coordination	[ ] Foul Time
Flag Placement correct? if applicable	Y / N	[ ] Trax Exclusive Track Occupancy	[ ] Stop and Hold

Employee RWP Material Requirements

Employee Name		Emp. Badge		RWP Role (Worker, Watchman, RWIC, etc.)
Department Name		Dept. No.		

RWP Card/Sticker		Record Of Briefing			PPE Worn		
[ ] Current and Correct	[ ] Lacking Cert for role	[ ] Complete	[ ] Illegible	[ ] None	[ ] Hard-Hat	[ ] Eyewear	[ ] Earwear
[ ] Expired	[ ] Missing	[ ] Incomplete/Incorrect			[ ] Gloves	[ ] Other: _____	

Employee RWP Knowledge Check

Can ID Roadway Worker in Charge?	Y / N	Can ID Working Limits?	Y / N
Can ID Watchmen/Flaggers?	Y / N	Can describe Train Approach Warning?	Y / N
Can ID Predetermined Place of Safety?	Y / N		

Employee Spot Check Status

Spot Check Status (include role info from back of form, if applicable)		Mitigation Type	
[ ] No Issues	[ ] Minor Mitigation (Complete)	[ ] Individual Coaching	[ ] Individual(s) Removed from Site
[ ] Major Mitigation	[ ] Minor Mitigation (Pending)	[ ] Group Coaching	[ ] Temporary Work Stop
Mitigation Description (Include issue being mitigated and mitigation)		[ ] Site Shutdown	[ ] Other: _____
More space on back		**General comments**	
		More space on back	

Sect

Examiner Signature:	_____	Date: _____

Employee name, badge, and date is required on all pages of this form

Employee		Employee Badge		Date	

Advanced Roles (as applicable)

Watchman/Lookout

100% Attention on Duty?	Y / N
Watchman Correctly Positioned?	[ ] Yes
[ ] No - Bad Sightlines	[ ] No - Unsafe
[ ] No - Not in position	[ ] Other: _____
Workgroup is cleared correctly?	Y / N
Sightlines	[ ] Watchman can explain sight requirements
	[ ] Watchman cannot explain sight requirements
	[ ] Sightlines are incorrectly calculated

Train Approach Warning in use (use mitigation comments for issues)

[ ] Phrase [ ] Whistle [ ] Airhorn

[ ] Visual [ ] Physical [ ] Other: _____

Flagger

Flagger Correctly Positioned?	
[ ] Yes	[ ] No - Unsafe
[ ] No - Bad Sightlines	[ ] No - Not in Position
[ ] No - Insufficient Distance from Grou	[ ] Other: _____

Lone Worker

Lone Worker using appropriate On-Track Safety typ	Y / N

Rail Maintenance Machine Operator

RMM Operator trained in vehicle being used?	Y / N
Equipment inspected at beginning of shift?	Y / N
RMM has 20 foot clearance?	Y / N
RMM is movement is safe?	Y / N

If not, describe:

Roadway Worker In Charge (RWIC)

Briefings	[ ] Provided correctly	[ ] Not provided correctly

If not, describe:

Certifications	[ ] All workers certified	[ ] 1+ workers not certifie
Safety Culture - Is safety placed first?		Y / N

If not, describe:

Radio requirement for FLAGGER, LONE WORKER, or RWIC

Radio Status	
[ ] Radio on and tuned correctly	[ ] Radio not tuned
[ ] Radio not on (or not charged)	[ ] No radio

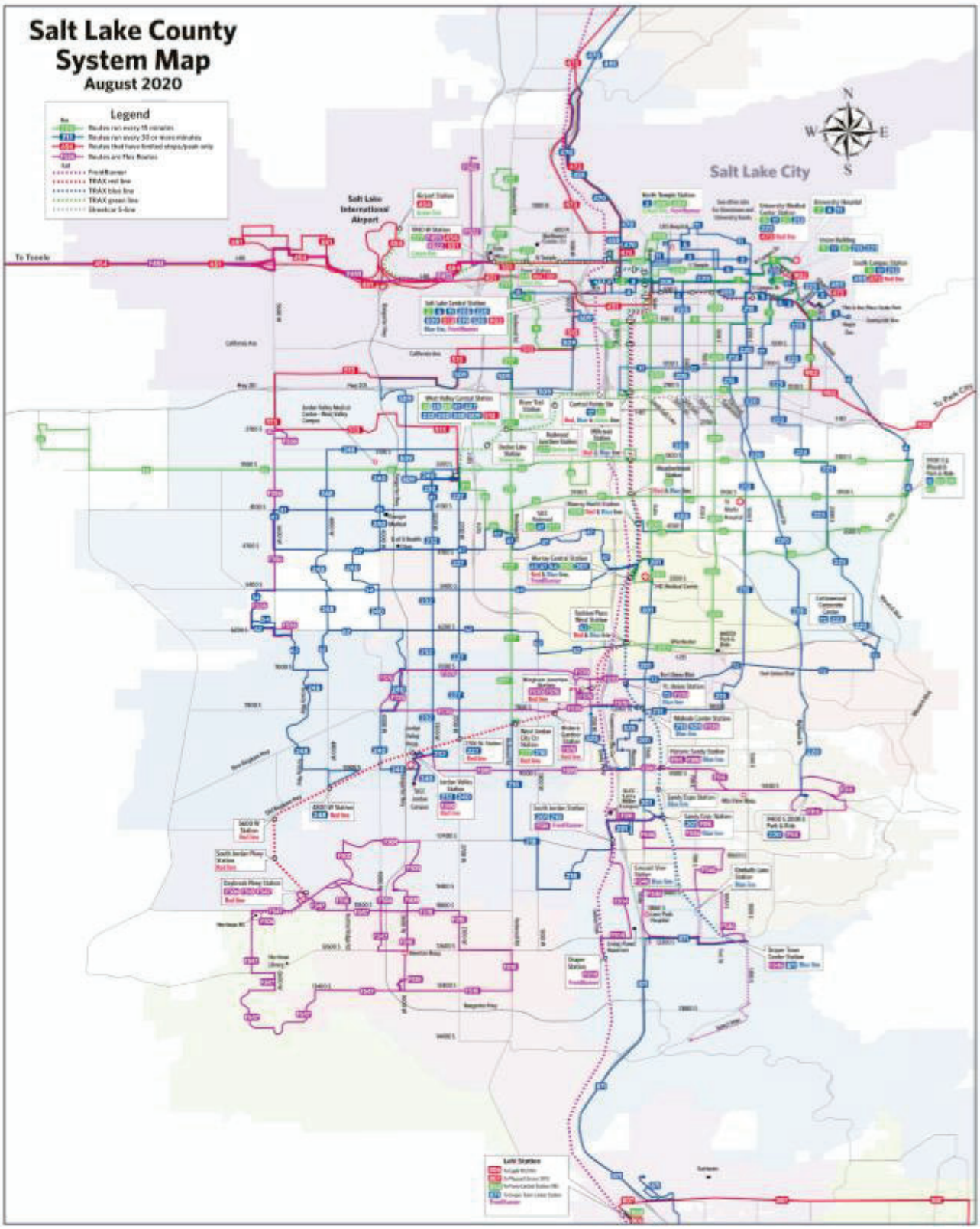
This space provided for addition comments (general comments or mitigation comments - please indicate which is being used)

Sec *Please sign and date both sides of the form*

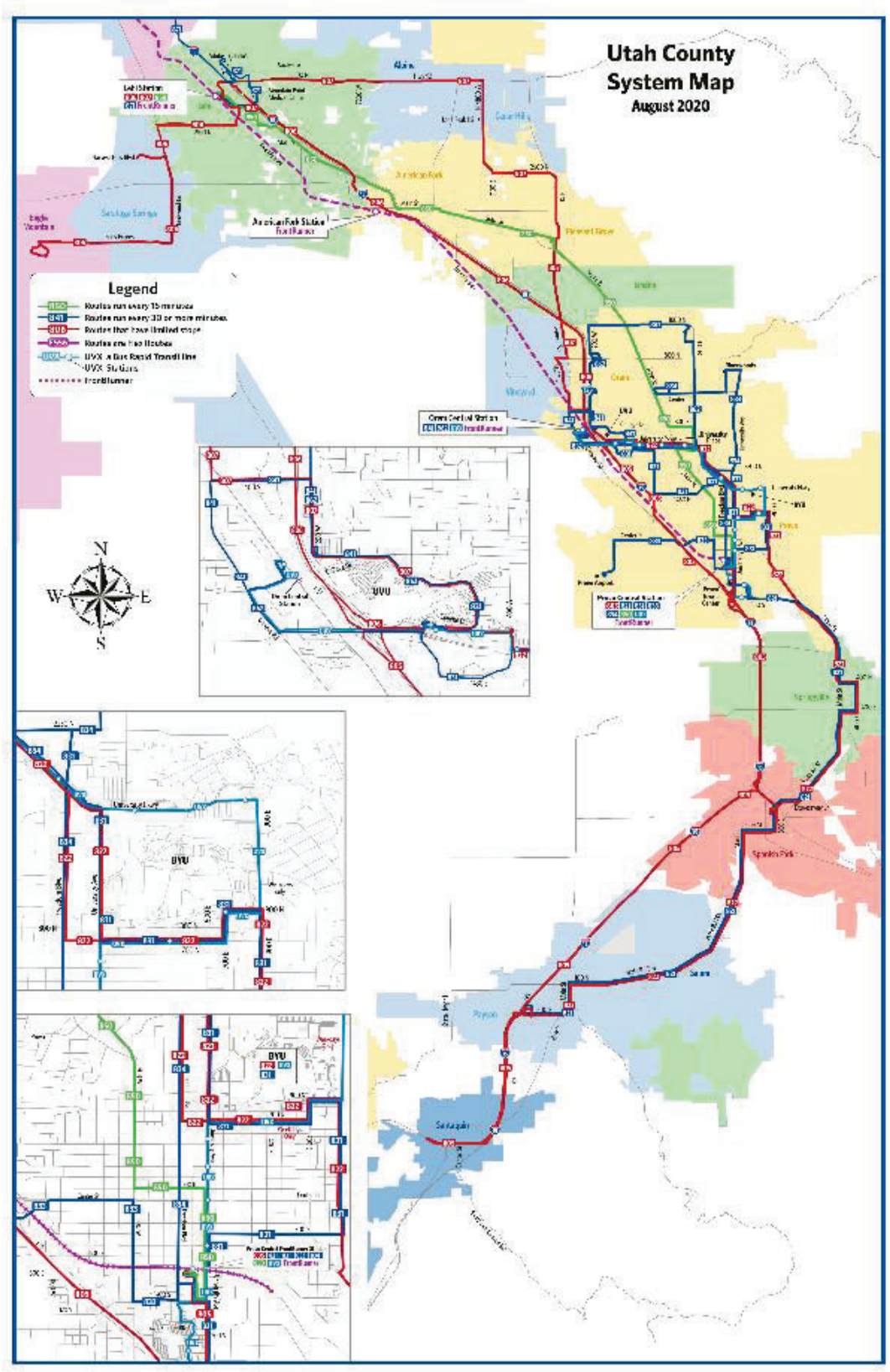
Examiner Signature: _____ Date: _____

Appendix C: System Maps

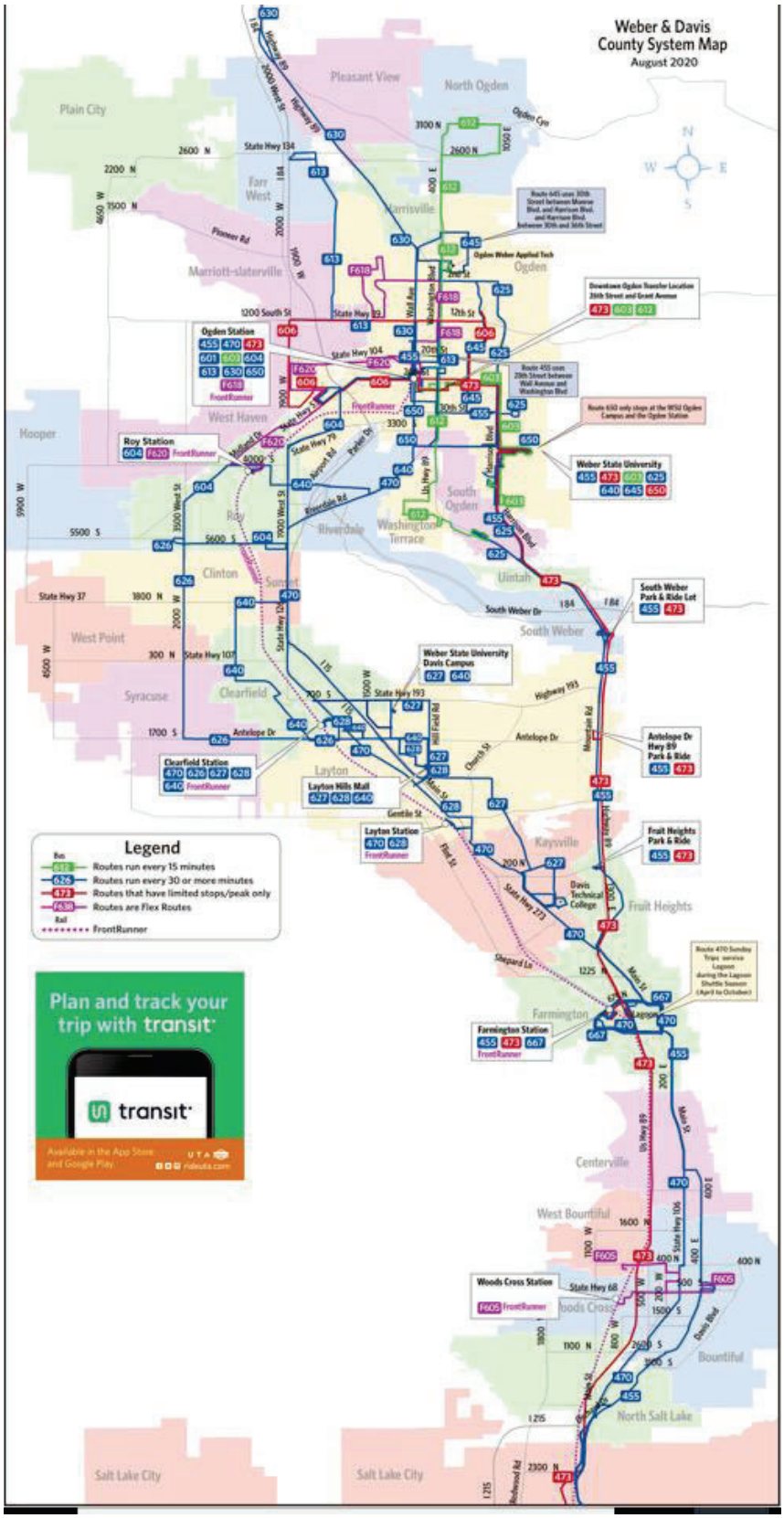
C-1: SALT LAKE BUS SYSTEM MAP



C-2: UTAH COUNTY SYSTEM MAP



C-3: WEBER, NORTH DAVIS AND BOX ELDER COUNTY SYSTEM MAP



C-4: RAIL (TRAX AND FRONTRUNNER) AND UVX MAP