

# Public Transportation Agency Safety Plan

Date: May 13, 2020 Version: 1.0





AC Transit is committed to plan and deliver bus service in ways that promote the health and safety of our customers, our employees, contractors and the general public. This policy outlines the District's safety commitment, consistent with current federal regulations (49 U.S. Code § 5329) and develops a Public Transportation Agency Safety Plan (PTASP) based on the Safety Management Systems approach.



AC Transit is committed to the highest practical level of safety and security standards and practices in the public transit industry and this PTASP. This commitment aligns with AC Transit's Strategic Plan and is consistent with the SMS four functional components: Safety Policy System Risk Management Safety Assurance Safety Promotion

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

Each employee shall be responsible for performing his or her duties in a safe manner following the procedures as set forth in the Public Transit Agency Safety Plan. It shall be the duty of each AC Transit employee to cooperate fully and provide any information that is requested during any investigation or inspection that may be undertaken by the District, right-of-way agencies, the Federal Transit Administration, or any other public which may have concern regarding the safety of operations within the AC Transit.

**General Manager** 

Date

# VERSION CONTROL

	Version Number and Updates Record the complete history of successive versions of this plan.					
Version Number	Section/Pages Affected	Reason for Change	Date Issued			
.5	Document Development	N/A	12/5/2018			
1.0	Approved Final	Safety Management System Compliance	5/13/2020			

# TABLE of CONTENTS

TRANSIT AGENCY INFORMATION	6
Overview	6
Vision Statement:	6
Mission Statements:	6
District Goals	6
Purpose	7
Plan Goals and Objectives	7
Goal	7
Primary Objectives	8
Plan Integration and Lines of Authority	8
District Profile	9
Agency Organization	10
Safety Management System Advisory Committee	11
PLAN DEVELOPMENT, APPROVAL, AND UPDATES	12
Development and Approval	12
Certification of Compliance	12
Review and Updates	12
SAFETY PERFORMANCE TARGETS	13
Safety Performance Measures	13
Target Setting Coordination	13
SAFETY MANAGEMENT POLICY	14
Annual Schedule of Board of Directors Agenda	14
Employee Safety Reporting Program	15
General Human Resources Policies	15
SAFETY RISK MANAGEMENT	
Safety Hazard Identification	16
New Service, Equipment, and Renovations	16
Operating System	16
Safety Risk Assessment	18
Safety Risk Mitigation	
Elimination or Minimization of the Hazard	21
Use of Engineering Controls	
Use of Administrative Controls	22
Use of Personal Protective Equipment	22
Tracking	
Incident Notification, Investigation and Reporting	
External Notifications and Thresholds	
Hyper-Alert Notifications	23
Accident Investigations Process	
Corrective Action	
Internal Safety Audits	
SAFETY ASSURANCE	
Emergency Operations Center	25

	AC Transit Public Transportation Agency Safety Plan
Emergency Response Plan (ERP)	25
ERP Annexes	
nployee Training and Re-certification	
New Employee Training	
Cybersecurity Training	
Re-Certification	

ERP Annexes	25
Employee Training and Re-certification	25
New Employee Training	
Cybersecurity Training	26
Re-Certification	26
Safety System Inspections	27
Safety Integration and Coordination	
Safety Committees	28
Safety Department	28
General Counsel	
Operations Department	
Operations Control Center	29
Human Resources	29
Innovation and Technology Department	29
Planning & Engineering Department	
External Affairs, Marketing, and Communications	
Internal Audit Department	
Contracts and Procurement	
Safety Responsibilities of Other Departments	
System Start-Up and Testing	
Training and Qualifications	
Permits and Licenses	
Safety Certification, System Start-up and Turnover	
Calibration, Functional Check-out, and Alignment	
SAFETY PROMOTION	
Safety Program Coordination	32
Safety Communication Channels	
Transit Asset Management Plan	
Fleet/ Facilities Maintenance Plan	
Maintenance Program	
Driver Vehicle Inspection Reports	
Security Functions	
Hours of Service	
Rider Guides	
Procurement Safety Standards	
Contractor Safety Coordination	
Regulatory Compliance	
Occupational Safety and Health Program	
Alcohol and Substance Abuse Compliance	
Hazardous Materials Program	

# TRANSIT AGENCY INFORMATION

# Overview

The Alameda-Contra Costa Transit District (AC Transit) is the third-largest public bus-only transit property in California, serving 13 cities and 9 adjacent unincorporated areas in Alameda and Contra Costa counties. AC Transit has been serving the East Bay since 1960, taking over from the Key System and its predecessors that carried passengers via buses, horse-drawn rail streetcars, electric streetcars, and ferries over the previous 100 years. AC Transit's origins date back to 1869; the year America's two coasts were connected by transcontinental rail. In that same year, AC Transit's predecessor began carrying passengers from the Jack London Waterfront into burgeoning Oakland in a horse-drawn rail car.

AC Transit has a long-standing commitment to preserving and improving the quality and quantity of transit service for 1.5 million East Bay passengers that populate a 364 square mile service area. AC Transit carries about 200,000 riders on an average weekday, along 158 service lines while generating over 20 million annual miles on its bus fleet. Adopted in April 2019, the District uses its Strategic Plan to concentrate available time and resources on activities that are its primary focus. Elements of the Strategic Plan consist of: Core Values, Vision and Mission Statements, Goals and Initiatives to organize the direction of the District's work efforts.

	AC Transit Core Values							
Safet	y	Service	Environmental Sustainability	Equity	Innovation	Integrity	Trust	

## Vision Statement:

AC Transit is valued as a leader that helps the Bay Area thrive by connecting East Bay communities to each other and to regional destinations.

#### **Mission Statements:**

We deliver safe, reliable, sustainable transit service that responds to the needs of our customers and communities.

## **District Goals**

- 1. Safe and Secure Operations
- 2. Convenient and Reliable Service
- 3. Financial Stability and Resiliency
- 4. High-Performing Workforce
- 5. Strong Public and Policymaker Support
- 6. Environmental Improvement

# Purpose

AC Transit operations are dependent upon the proficiency and well-being of its employees and maximizing its capital resources. To ensure preservation and safety of these resources, AC Transit adopted a comprehensive safety management system, with system safety as its foundation, as the model for safety management and continuous improvement in safety performance.

AC Transit's Public Transportation Agency Safety Plan (PTASP) serves as a guideline in the establishment of technical and managerial safety strategies for the identification, assessment, and control of safety risks to AC Transit customers, employees, contractors and the general public who may come into contact with the system. Specifically, the plan establishes the following:

- States the District's commitment and philosophy to actively sustain safe transit operations
- Establishes and manages safety activities intended to minimize risk and loss of District resources, and to maximize the safety of our customers, our employees, contractors and the general public
- Integrates the safety function throughout the District's organizational structure, from the General Manager, to managerial staff, to front-line employees
- Defines organizational safety responsibilities and accountabilities
- Provides for the documentation and verification of safety activities
- Evaluates safety activities for continued improvement

System safety is defined as the District-wide coordinated effort of all divisions to apply operating, technical, and risk management techniques and principles to conserve life and property; prevent and reduce mishaps or incidents, and the effects which result; and to maintain a safe and healthful work environment.

The PTASP applies to all AC Transit operations; including bus, demand-transit, and para-transit; all supporting divisions; and to all activities, which involve the design, construction, operation, and maintenance of the transit system, including system expansions. Each AC Transit division and department is charged with the responsibility for the implementation and success of the plan.

# Plan Goals and Objectives

## <u>Goal</u>

The safety goal is to design, construct, test, and operate a transportation system that attains an optimum level of safety through the effective management of safety risks. This goal is reflected in the planning, design, construction, operation, and maintenance phases. District staff are directed toward achieving this goal within the District's strategic goals and constraints.

Achievement of the goal is accomplished, in part, through the application of a formal system of analytical techniques and methods for the identification, analysis, evaluation, and resolution of safety risks.

#### Primary Objectives

The primary objectives of the PTASP are to achieve a level of safety performance that meets or exceeds the operating experience of similar bus transit systems in the United States through:

- Analyzing employee and passenger injuries
- Using industry standards for the identification, assessment, evaluation, and mitigation of hazards that may impact customer and employee safety and those that may be affected by bus operations
- Incorporating safety, fire protection, emergency management, and cybersecurity measures into design criteria and specification development and in all transit system designs
- Analyzing vehicle collisions, mishaps and other incidents
- Training AC Transit personnel in safety related programs and ensure that safety certifications are up to date and maintained
- Complying with CAL-OSHA rules, local codes and federal, state, and local environmental regulations
- Increasing and strengthening community engagement in the safety of the transit system by involving and educating community organizations and schools in bus safety
- Promoting transit safety through campaigns, promotional contests, and other activities
- Improve planning and projections for fiscal support needs by tracing and analyzing historical data
- Coordinating and communicating safety risks with jurisdictional partners and the Metropolitan Transportation Commission (MTC)

## Plan Integration and Lines of Authority

The PTASP responsibilities at each organizational level are outlined as follows:

<u>General Manager</u> – is vested with the primary responsibility for the activities of the District and overall safety performance. The General Manager has designated the Safety Management Systems Advisory Committee with the responsibility for developing, implementing, and managing the District PTASP.

<u>Chief Officers and Executive Directors</u> - are responsible for upholding and promoting safety policies, developing safety performance goals, and for holding department directors and managers accountable for the safety performance within their respective divisions/departments.

<u>Department Directors and Managers</u> - are directly accountable and responsible for safety performance within their functional area. This responsibility includes determining and implementing countermeasures required to counteract safety risks and problems that negatively impact AC Transit's safety performance.

<u>Supervisors and Lead Staff</u> - Supervisors and Lead staff are accountable and responsible for the safety performance of all personnel and equipment under their supervision, implementing and maintaining control measures, and for reporting all mishaps and incidents in accordance with the PTASP.

<u>District Personnel</u> - all personnel are responsible for performing their work safely, following procedures and rules, calling attention to circumstances that may impact safety performance, and for reporting mishaps and incidents to their Supervisor, in accordance with established requirements for the protection of themselves, co-workers, customers, facilities, and equipment.

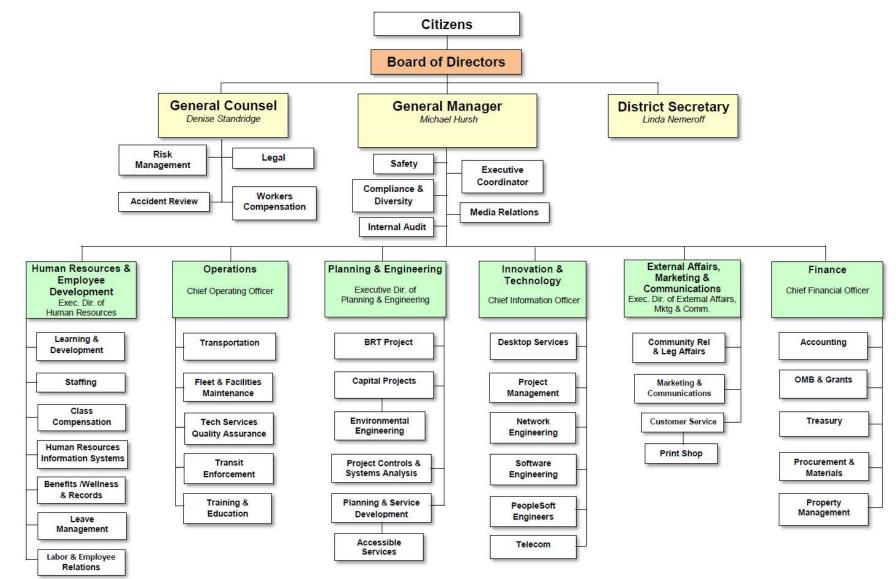
Transit Agency Name	Alameda Contra-Costa Transit District
Transit Agency Address	1600 Franklin Street, Oakland, Ca. 94612
Name and Title of Accountable Executive	Michael Hursh, General Manager
Chief Safety Officer	Tabby Davenport, Safety Manager
Mode(s) of Service Covered by This Plan	Motor Bus, Commuter Bus, Demand Response
List All FTA Funding Types	5307, 5309
Mode(s) of Service Provided by the Transit Agency (Directly operated or contracted service)	Motor Bus – Direct Operated (MB-DO) Commuter Bus – Direct Operated (CB –DO) Motor Bus – Purchased Transportation (MB-PT) Demand Response – Direct Operated (DR-DO)

#### District Profile

SR 20-151 Attachment 1

AC Transit Public Transportation Agency Safety Plan

## Agency Organization



As of May 24, 2019

# Safety Management System Advisory Committee

Department	Title	Resource
Safety	Safety Manager	Tabby Davenport
	Chief Operating Officer	Salvador Llamas
	Director of Maintenance	Cecil Blandon
Operations	Director of Transportation	Derik Calhoun
	Protective Services Manager	Kerry Jackson
	Training and Education Manager	Michael Flocchini
	Chief Financial Officer	Claudia Allen
Finance	Director of Management & Budget	Chris Andrichak
	Director of Procurement and Materials	Gene Clark
Planning &	Executive Director of Planning and Engineering	Ramakrishna Pochiraju
Engineering	Director of Project Controls and Systems Analysis	William Tonis
Innovation & Technology	Chief Information Officer	Ahsan Baig
	Executive Dir. of External Affairs, Marketing & Com.	Beverly Greene
External Affairs	Director of Legislative Affairs & Community Relations	Claudia Burgos
Risk Management	Claims and Liability Manager	Jean Paul Popoff
Compliance	Director of Compliance	Lynette Little
Human Resources	Executive Director of Human Resources	Nathaniel Kramer

# PLAN DEVELOPMENT, APPROVAL, AND UPDATES

# Development and Approval

AC Transit's Safety Management Systems (SMS) Advisory Committee is empowered and authorized by the General Manger to develop, implement and administer the PTASP.

The District's General Manager shall submit to the AC Transit District Board the Public Transportation Agency Plan for approval.

Name of Entity That Drafted This Plan	Alameda Contra-Costa Transit District (AC Transit)			
Signature by the Accountable Executive	Signature of Accountable Executive	Date of Signature		
	Name of Individual/Entity That Approved This	Date of		
Approval by the Board of	Plan	Approval		
Directors or an	AC Transit Board of DIrectors			
Equivalent Authority	Relevant Documentation (title and location)			
	Board Document Staff Report (SR 20-151)			
	Name of Individual/Entity That Certified This Plan	Date of Certification		
Certification of	Safety Management System Advisory Committee			
Compliance	Relevant Documentation (title and location)			

## Certification of Compliance

## Review and Updates

The Safety Management Systems (SMS) Advisory Committee is responsible to review the PTASP annually to ensure that it remains current and effective. The annual review of the plan will be conducted as part of an internal audit starting at the fiscal mid-year and ending the same fiscal year. The focus of the review is to:

- Evaluate current safety tasks and initiatives for appropriateness
- Refine and improve task descriptions and activities
- Identify new tasks and initiatives, which may be required
- Define organizational responsibility for accomplishing safety related tasks
- Incorporate organizational, operational, or legislative changes

Changes in the transit system operational configuration; management organization; the environment in which the transit system operates; safety policies, goals, or objectives; or regulatory requirements may require revision of the PTASP and/or its implementation. Revisions, if necessary, are coordinated and led by the SMS Advisory Committee and approved by the General Manager and documented under Version Control.

# SAFETY PERFORMANCE TARGETS

The District has established safety performance targets that contain specific numerical targets based on the safety performance measures established by FTA in the National Public Transportation Safety Plan. The District has adopted FTA's four initial safety performance measures: (1) Fatalities, (2) Injuries, (3) Safety Events, and (4) System Reliability.

The District has coordinated with Metropolitan Transportation Commission (Metropolitan Planning Organization) to the maximum extent practicable to assist with the selection of the safety performance targets. At a minimum, FTA requires each transit agency to make its safety performance targets available to the State and Metropolitan Planning Organization.

# Safety Performance Measures

Specify performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.

	Fat	alities	Injuries		Safety Events		Reliability
Mode of Transit Service	Total	Rate/ 100K	Total	Rate/ 100K	Total	Rate/ 100K	Mean Between Failures
Motor Bus	1	0.005	189	0.938	175	0.869	5,900
Commuter Bus	0	0.000	3	0.086	3	0.086	13,000
Demand Response	0	0.000	0	0.000	0	0.000	10,800

# Target Setting Coordination

AC Transit coordinates with the Metropolitan Transportation Commission in the selection of the Districts safety performance targets. The following table identifies the State representative and transmission dates with the Metropolitan Planning Organization.

Targets	State Entity Name	Date Targets Transmitted
Transmitted to the State		
Targets	Metropolitan Planning Organization Name	Date Targets Transmitted
Transmitted to the	Metropolitan Transportation Commission	
Metropolitan		
Planning Organization		

# SAFETY MANAGEMENT POLICY

AC Transit is committed to plan and deliver bus service in ways that promote the health and safety of our customers, our employees, contractors and the general public; and sets the direction for developing a Public Transportation Agency Safety Plan (PTASP) based on the Safety Management Systems approach. AC Transit Public Transportation Agency Safety Plan includes the processes and procedures necessary for implementing Safety Management Systems and processes for safety risk management, safety assurance and safety promotion. Appendix 1 identifies AC Transit's Board policy No. 480 Safety Management Systems Policy.

Regularly agenized Staff Reports are scheduled for the Board of Directors on a monthly, bimonthly, quarterly and annual basis. Staff Reports provide detailed information to the Board of Directors on various topics related to Safety Management Systems by the following departments Operations, Planning, Finance and Audit, and External Affairs. Illustrated below in Figure 8 is the annual schedule of regularly agenized staff reports for the Board of Directors and department assignments.

# Annual Schedule of Board of Directors Agenda

#### OPERATIONS ITEMS (2nd Wed. of the Month)

Quarterly (Feb., May, Aug., Nov.) Contracts/Purchasing Activity (CFO) Operations Performance Report (include Customer Service Call Center Figures) (COO)

#### Semi-Annual (May/Nov.) DBE/FTA Report and Goal Update (CCA)

#### Annual (Jan.)

State of the Bus Fleet (COO) FINANCE Report on Class Spec Modifications in Prior Year (EDHR) Monthly

#### PLANNING ITEMS (2nd Wed. of the Month)

Quarterly (Feb., May, Aug., Nov.) Update on Bus Rapid Transit Project (EDPE) Update on Transbay Transit Center Project (EDPE) Involvement w/ External Planning Processes (EDPE)

Annual (Oct.) Local/Transbay Ridership Report (EDPE)

Annual (June) CARB Update (COO) Update on SD2 Service/Operations (EDPE)

Semi-Annual (Jan./July) Update on South County Corridors Project (EDPE)

#### EXTERNAL AFFAIRS ITEMS (4th Wed. of the Month)

Monthly Legislative Report (EDEAMC)

Semi-Annual (April/Oct.) Status of the Next Generation of Clipper (CIO)

Annual (Jan.) Federal/State Advocacy Program (EDEAMC)

#### FINANCE AND AUDIT ITEMS (4th Wed. of the Month)

Monthly Report on Investments (CFO) Fiscal Policies - One per month (CFO)

Bi-Monthly (Oct., Dec., Feb., April, June, Aug.) Budget Update (CFO)

Quarterly (Feb., May, Aug., Nov.) Board/Officers Travel/Meeting Expenses (DS) Employee Out-of-State Travel (CFO) Surplus/Obsolete Materials (CFO)

Annual (As Indicated) Fare Structure Update - March (CFO) Audit Engagement Letter - June (CFO) Appropriations Limit (CFO) +Provide Notice (Post Resolution) - June + Establish Appropriations Limit - July (Board) Budget Calendar - Nov. (CFO) Year-End Audited Financial Statements - Nov. (CFO) Budget Revision/Financial Performance - Feb. (CFO)

#### **BOARD OF DIRECTORS**

Monthly AAC Minutes (EDPE) Retirement Board Minutes (Wildmann)

Quarterly (Feb., May, Aug., Nov.) Litigation Report - Closed Session (GC)

Se<mark>mi-Annual (April/Nov.)</mark> Retirement Board Update (Wildmann)

#### Annual (As Indicated)

Meetings in Contra Costa and South Alameda Co. (DS) Joint Meeting w/ Retirement Board (DS) Joint Meeting w/ AAC (DS) Adopt Appropriations Limit (July) (CFO)\* \* Post Notice 15 Days Prior to Adoptions Parcel Tax Oversight Committee Report - Dec. (CFO) Annual District Budget - June (CFO)

#### FINANCING CORPORATION

Quarterly (Feb., May, Aug., Dec.) Financial Statements (CFO)

Annual (Dec.) Year-End Audited Financial Statements (CFO)

# Employee Safety Reporting Program

The District and its respective bargaining units have provisions to protect employees when reporting safety matters. The Safety Administrator facilitates site specific Safety Committees that meet on a monthly basis. Committee members represented by District staff and Union representatives discuss safety and security matters of mutual interest and concern. The Safety Committee identifies issues and facilitates corrective actions.

The following documents address employee guidelines and behaviors:

## **General Human Resources Policies**

200	Alcohol and Substance Abuse Policy
201	Anti-Bullying and Prevention of Abusive Conduct
202	Background Investigations
202A	Background Checks for Employment
205A	Dependents at Work
207	Equal Employment Opportunity and Affirmative Action Policy
208A	Memorial Plaques
209	Nepotism
213	Prohibiting All Forms of Unlawful Employment Discrimination, Including Sexual or Other Forms of Harassment
213A	Prohibiting All Forms of Unlawful Employment Discrimination, Including Sexual or Other Forms of Harassment
214A	Property Loss or Damage (District or Personal)
216	Smoke Free Environment
217	Use of District Resources
218	Zero Tolerance for Workplace Violence



- Board Policy 201 Anti-Bullying & Prevention of Abusive Conduct
  - Board Policy 213 Prohibiting all forms of Unlawful Employment Discrimination, Including Sexual or other forms of Harassment
- Board Policy 218 Zero Tolerance for Workplace Violence
- Employee Handbook

- Operations User Guide
- Maintenance Guide Book

# SAFETY RISK MANAGEMENT

# Safety Hazard Identification

AC Transit employs a variety of strategies to identify, assess, and resolve system safety risks. The specific strategy employed is dependent on the specific hazard and what aspect of the District's operation might be impacted by the hazard.

## New Service, Equipment, and Renovations

Formal hazard assessments are conducted prior to implementing new and upgraded systems equipment; during the preliminary engineering phase of renovations; and on all projects that include safety critical systems and changes to bus operations, inclusive of alterations to and the addition of new bus routes. These assessments are undertaken to identify safety critical systems and document any hazardous components, interfaces, environmental factors, and safety risks associated with operations, maintenance, and emergency procedures, as well as their effect on passengers, the public, employees, equipment and infrastructure.

#### Historical Data and Trend Analysis

The District's incident data provides insight as to what has happened in the past and what safety risks and hazardous conditions should be reviewed and considered for mitigation. This may include reviews of rule violations, bus collision histories, and employee and passenger injury trends.

#### **Design Reviews**

The SMS Advisory Committee participates in design reviews to identify conditions and events that may be hazardous to employees, customers or those who may come into contact with the District's bus service.

#### **Operating System**

The District conducts both formal and informal operational and occupational safety evaluations of its facilities, equipment, and operations to proactively identify hazards.

#### Occupational Safety and Health Evaluations

The District's Human Resources Department is tasked with providing a safe and healthful working environment for its employees and reducing the likelihood and severity of accidents. The Department Programs emphasize the proactive identification, evaluation, and control of safety hazards arising within and out of the occupational environment. Corrective action plans are implemented where indicated. Systems, processes, and facilities are continually reviewed for hazards. The District employs surveys, inspections, audits, committees, injury causation evaluations, and solicits employee input as part of its hazard review.

Industrial Hygiene surveys are conducted to assess the potential degree of employee exposure to chemical, biological, and physical agents encountered in the workplace. The results of these surveys are then used to determine the necessary corrective actions, if any, including the implementation of engineering and administrative controls and/or the required used of personal protective equipment (PPE). The District's Safety Department reviews employee injuries and illnesses, which are also reviewed by the appropriate safety committee.

#### Inspections

All District operations and maintenance facilities under safety inspections by the Safety Department at least once a year to ensure the safety of its customers and employees. Individual maintenance divisions undergo quarterly inspection due to the nature of the hazards and potential risks associated with their operations. Inspection reports are issued which lists the hazards found during the inspection. Follow-up inspections, remedial actions, and reports are logged.

#### Accident/Incident Investigations and Data

Accident and incident reports, injury and illness reports, and workers' compensation databases are additional methods the District uses to identify hazards. The Accident Reduction Committee (ARC) meets monthly to analyze accident/incident trends and to provide leadership in the implementation of appropriate mitigation controls. Post-incident review and analysis of all major accidents and incidents is conducted by stakeholders from the District's Transportation, Operations, Legal and Labor Departments to develop a consensus determination of causal factors and the appropriate organizational response, inclusive of retraining and discipline.

All incidents are investigated by Field Supervisors at the scene with follow-up postmortem additional investigation as warranted by the facts and circumstances of the respective incident.

#### Audits

Audits are conducted by the District's business units and Safety Department. The Safety Department ensures that internal audits meet Federal, State, and local requirements. Results of the audit are available for review by the required authority or governance committee.

#### Ad Hoc Hazard and Incident Reporting

All District employees are responsible for reporting hazardous conditions to their immediate supervisor or calling in to the Operations Control Center (OCC), as circumstances might require. Hazards reported to the OCC are logged into Origami Data is accumulated and used to identify actual and potentially hazardous conditions which may potentially adversely impact the safety of passengers, employees, and persons interacting with the District. Data maintained and analyzed included, but is not limited to: injuries,

potentially hazardous equipment use and failures, and rules, regulations, and procedures violations. Hazard related data is tracked longitudinally to identify trends which might impact the District's system safety goals and objectives.

Hazards that are determined by Operations and/or the Safety Department to be an immediate safety threat, such as malfunctioning wheelchair ramps or bus door sensors, are immediately corrected. These incidents are sent to the appropriate manager or safety administrator for resolution. Members of the general public may also report concerns by contacting Customer Service, the Risk Management Department, or Field Supervision. These contacts are logged and routed to the correct person for resolution.

## Safety Risk Assessment

AC Transit performs safety risk assessments on its assets through its Risk Ranking Tool and the Transit Asset Management Plan to measures and mitigate safety risks. The ranking tool is used to categorizes the likelihood, severity, and impact factors affecting agency safety risks. As outlined in the Transit Assessment Management Plan, the condition ratings and useful life benchmarks prioritizes the severity of safety risks on physical assets.

#### Hazard Categories

In general, the District identifies system safety hazards by conducting formal project hazard assessments. These include operating system investigations and evaluations of incidents that have resulted in or have the potential to result in injury, fatality, or system loss. Operating system incident, accident, and/or mishap trend analysis results are categorized through a formal classification system. The hazard classification system is used to determine the acceptability of assuming the risk associated with identified hazards and the necessity of implementing risk controls to reduce the hazard to acceptable levels or to eliminate the hazard altogether.

Hazard categorization involves classifying the identified hazards in terms of severity and probability. The District has adapted the Risk Assessment and Hazard Risk index matrixes developed by the United Stated Department of Defense document, Standard Practice for System Safety, MIL-STD-882E, as its guideline for determining the hazard severity and probability.

#### Hazard Severity

Hazards are rated according to their effect on District customers, employees, the public, and District operations. The hazard severity rating is a subject measure of the worst-case consequence that would result from design deficiencies; components failure of malfunction; human error or negligence; environmental conditions; or operations or maintenance practice, and procedure deficiencies.

#### Hazard Severity Rating

	Soucritu		Charac	teristics	
	Severity	People	Equipment/Services	Financial	Reputational
I	Catastrophic	Multiple fatalities and/or numerous severely injured	Total loss of equipment or system disruption, requiring months to rectify	Estimated loss from the incident in excess of \$7,000,000	Ongoing media coverage, severe to irreparable reputational damage, governmental intervention, Weeks to Months
II	Critical	Singular fatality and/or several severely injured	Significant loss of equipment or system disruptions, requiring week to rectify	Estimated loss from the incident in the range of \$3,000,000 to \$7,000,000	Prolonged media coverage, serious reputational damage, sustained government involvement, Days to Weeks
	Moderate	Severe injuries and/or numerous minor injuries	Some loss of equipment or system disruption, requiring < 7 days to rectify	Estimated loss from the incident in the range of \$500,000 to \$3,000,000	Adverse media coverage, reputational damage, government involvement, Days
IV	Minor	Severe injury and/or multiple minor injuries	Some loss of equipment, no system disruption, requiring < 24 hours to rectify	Estimated loss from the incident in the range of \$15,000 to \$500,000	Local media coverage and some reputational damage, Day
V	Insignificant	Minor injuries or No injuries	Minor damage to equipment, no system disruption, no immediate repair necessary	Estimated loss from the incident is up to \$15,000	No adverse media coverage or reputational damage

#### Hazard Probability Rating System

The probability that a hazard will occur during the planned life expectancy of the system element, sub-system or component is described qualitatively, in potential occurrences per unit of time, events, population, items, or activity. A qualitative hazard probability is derived from research, analysis, and evaluation of safety data from the operational experience of the District or from historical data from comparable agencies.

Probability Level	Specific Individual Item	Fleet or Inventory	Frequency
Frequent	Likely to occur frequently in the life of an item	Continually experienced	> 25 incidents per annum (Weekly)
Probable	Will occur often in the life of an item	Will occur regularly	> 12 to < 25 per annum (Monthly Plus)
Likely	Will occur several times in the life of an item	Will occur several times	>5 to < 12 per annum (Monthly)
Occasional	Likely to occur sometime in the life of an item	Will occur a few times	> 1 to < 5 per annum (Annually)
Remote	Unlikely but possible to occur sometime in the life of an item	Possible to occur in the life of the system	> .0001 to < 1 per annum (Rarely)
Improbable	So unlikely, it can be assumed that occurrence may not be experienced	It can be assumed it will not occur	< .0001 per annum

#### Hazard Probability Rating System

#### Hazard Risk Index

Viewed in relation to one another, the hazard severity and hazard probability properties measure a hazard's magnitude and allows for the prioritization of applying control measures. Hazards are then analyzed, evaluated, and treated based on the likelihood that an event will occur and the potential severity of the consequence of that occurrence. The value derived by considering a hazard's severity and probability is the Hazard Risk Index. The Hazard Risk Index measures the acceptability or unacceptability of the hazard.

The Hazard Risk Index enables the District's management to properly assess the amount of risk involved by viewing the hazard relative to what it would cost the District (in terms of man-hours, funding, operations, schedule, etc.) to reduce the hazard to an acceptable level. The following matrix identified the Hazard Risk Index based on hazard category and probability, as well as the criteria for defining further action based on that index.

Frequency of Occurrence	Severity Category				
	1 Catastrophic	2 Critical	3 Moderate	4 Minor	5 Insignificant
(A) Frequent	1A	2A	3A	4A	5A
(B) Probable	1B	2B	3B	4B	5B
(C) Likely	1C	2C	3C	4C	5C
(D) Occasional	1D	2D	3D	4D	5D
(E) Remote	1E	2E	3E	4E	5E
(F) Improbable	1F	2F	3F	4F	5F

#### Risk Index Rating

Risk	Decision Criteria	Rating
	Unacceptable	1A, 1B, 1C, 2A, 2B, 3A
	Undesirable - Executive Level Review Required	1D, 2C, 2D, 3B, 3C, 4A, 4B
	Acceptable - Management Level Review Required	1E, 1F, 2E, 2F, 3D, 3E, 4C, 4D, 5A, 5B
	Acceptable - Acceptable without further review	3F, 4E, 4F, 5C, 5D, 5E, 5F

#### Risk Decision Criteria

## Safety Risk Mitigation

The District's SMS Advisory Committee is the principle bodies for assessing and resolving identified hazards within the District's operating system. The committee establishes control measures to reduce the likelihood and severity of risks based on the ranking tool. Physical assets are mitigated through the agency's Capital Improvement Program.

If the SMS Advisory Committee conducts a formal assessment, the Hazard Risk Index is used to assist the decision-making process in determining whether a safety risk should be eliminated, controlled, or accepted. If the potential for an accident/incident reveals a Category 1 (Catastrophic) occurrence with a Level A (Frequent) probability, the system safety effort is directed toward eliminating the hazard through design, redundant hazard control measures, or, avoidance. A catastrophic (Category 1) or critical (Category 2) safety risk may be determined to be tolerable if it is determined that the likelihood of occurrence is highly improbable. A probable or Level B safety risk may be tolerated if it is demonstrated that the result of the occurrence would be minor (Category 4) or minimal (Category 5). This rubric provided a basis for logical risk management decision-making through the informed consideration of the hazard's severity and probability. As safety risks are identified, various strategies are employed to control and reduce the risks to acceptable levels.

## Elimination or Minimization of the Hazard

<u>Design for Minimum Risk</u> – The hazard will be eliminated by change of design, if feasible. If the identified hazard cannot be eliminated by design revisions, the hazard will be reduced to an acceptable level, according to the Risk Assessment Criteria, through design selection.

<u>Incorporate Safety Devices</u> – If design revisions or selection cannot eliminate or adequately reduce the identified hazard(s), then the District will reduce the hazard to an acceptable level through the use of fixed, automatic, or other appropriate protective safety design features or devices.

<u>Provide Warning Devices</u> – When both design and safety devices fail to provide effective elimination or adequate reduction of the identified hazard(s), warning devices and signage will be used to provide warning signals to the public and District personnel. Warning signals and their

implementation will be designed to minimize the probability of incorrect interpretation as to their meaning and will be standardized within like types of systems and applications.

#### Use of Engineering Controls

Engineering controls reduce the burden of occupational injury and illness for the District's employees and the customers it serves. Engineering controls protect workforce by removing or reducing hazardous conditions such as hazardous dust or excessive noise or by isolating the worker from the hazard. Examples include driver barriers, bus striping, or office patricians to shield airborne emissions from employees. Well-designed engineering controls can be highly effective in protecting the District's workforce.



#### Use of Administrative Controls

Where identified hazards cannot be eliminated through design selection or reduced to acceptable levels through safety and warning devices, the District

will implement appropriate procedures and training. However, without specific direction from the District's Executive Staff, no warning, caution, or other forms of written or pictorial advisories may be used as the sole risk reduction method for Category 1 and 2 hazards.

#### Use of Personal Protective Equipment

Provision of Personal Protective Equipment (PPE) appropriate to the hazard – If the identified hazard cannot be eliminated or adequately controlled with administrative controls, personal protective equipment may be needed. The District requires training on the proper use of the equipment prior to employees being place in environments requiring the use of such equipment.

#### Tracking

The District's SMS Advisory Committee tracks and analyze identified hazards within the District's sphere of operations until resolution. Safety risks related to capital projects (such as BRT, equipment procurements and system renovations and upgrades) are reviewed and resolved by the Capital Programming Committee specifically created to review and prioritize project requests.

Executive Staff is advised of Category I and II level hazards that cannot be acceptably resolved by the Capital Programming Committee to an acceptable level for final resolution.

DRIVER BARRIER EXAMPLE

# Incident Notification, Investigation and Reporting

## **External Notifications and Thresholds**

All external notifications of significant transit incidents are initiated by AC Transit's Operations Control Center in accordance the reporting thresholds listed below. The SMS Advisory Committee or designee is the primary point of contact with all external agencies in the event an investigation is initiated by any of the external agencies and for the provision of updates and additional information, as required by the incident. All initial notifications will include the following:

- Brief description of the incident
- Casualties number of fatalities and/or injuries
- Date, time, and location of the incident

#### **Hyper-Alert Notifications**

District management, including the General Manager, General Counsel, Chief Operating Officer, and Director of Transportation, and the Claims Manager are notified of any event resulting in injury to passengers or employees, damage to District property, damage to non-District property due to transit operations, disruption of transit services, or any other significant event. All notifications are made via the District's automated Hyper-Alert system and include messaging via text message, email, and telephone call. Notification lists are maintained by Operations Control Center and are updated on a regular basis.

#### **Accident Investigations Process**

Personnel from the District's Services Supervision initiate investigations of all transportation related incidents. The seriousness of the event determines the level of investigation and may escalate the investigation to include personnel from the Office of the General Counsel. Incidents, which do not involve serious injury and/or significant damage, usually require only an investigation by the Road Supervisor responding to the scene. Once on scene, the Road Supervisor will:

- Assess the incident
- Assist local law enforcement, as appropriate
- Conduct an investigation
- Conduct interviews of involved District personnel, witnesses, and other involved parties, as appropriate
- Gather and collect physical evidence
- Photograph the scene, as appropriate
- Submit a report to the Legal Department based on the information collected

All Category I-III incidents and hazardous conditions require major incident notification via Hyper-Alert notification to executive-level representatives from Services Supervision, Operations, Transportation, Legal, Safety, and, as appropriate, Maintenance. When notified of a major-level,

Category I-III incident, the incident investigation team, inclusive of an investigator from the Office of the General Counsel:

- Conducts and on-site inspection and documentation of the incident or accident scene;
- Reviews reports and/or statements provided by involved personnel;
- Conducts interviews with involved personnel and witnesses, as appropriate;
- Reviews physical evidence;
- Secures District property and vehicles for post-incident inspection;
- Performs systems tests and analysis, if applicable; and
- Coordinates incident/accident reconstruction activities, if applicable.

In addition to the on-scene and post-mortem investigations, the District's Accident Review Unit reviews bus collisions and on-board incidents for preventability.

#### **Corrective Action**

The Safety Manager reviews all accident reports for potentially serious incidents or conditions. Additionally, when reports and statistics show repetitive trends that result in an inability to meet or exceed District safety goals and objectives, the Safety Manager may initiate an investigation to determine causal factors.

#### Internal Safety Audits

The internal system safety audits provide the means of informing District management on the extent to which the District's internal processes, programs, and activities are meeting planned and published system safety program requirements and goals. Audits are authorized by District senior management. District Safety Staff or its designee conducts the system safety audits on both scheduled and random bases. The following area are included in the schedule of audits:

- Goals and Objectives
- Overview of Management Structure
- Program implementation Activities and Responsibilities
- Hazard Management Process
- System Modification
- Safety and Security Certification
- Safety Data Collection and Analysis
- Accident Investigation
- Emergency Management Program
- Internal Safety Audits

- Policy ad Rules Compliance
- Facilities and Equipment Inspections
- Maintenance Audits and Inspections
- Training and Certification for Employees and Contractors
- Configuration Management and Controls
- Local, State, and Federal Requirements
  - Hazardous Materials Program
  - Drug and Alcohol Program
- Procurement Process

The District may conduct both announced and unannounced audits. Announced audits are scheduled to minimize disruption of activities. Unannounced audits may be performed by the Safety Department where the audit team is informed.

# SAFETY ASSURANCE

# Emergency Operations Center

The Emergency Operations Center (EOC) provides the ability to respond quickly and in an organized manner that is vital to the continuation of transit service during a special event, emergency, or during the recovery from a catastrophic incident, including but not limited to:

- Earthquake
- Fire
- Flooding
- Hazardous material spill
- Medical emergency

- Pandemic
- Severe weather
- Transit related accidents
- Volcanic activity
- Acts of terrorism

AC Transit has an Emergency Operations Plan that is designed to assist District staff who have key roles and responsibilities during an incident. Emergency Management Response Team staff required to report to the Emergency Operations Center uses the Emergency Operations Plan to guide their actions in completing assigned tasks. The Emergency Operations Plan is comprised of multiple documents, identified and described below.

## **Emergency Response Plan (ERP)**

The ERP provides an overview of AC Transit's organization, policies, and approach to emergency management of an incident; summarizes actions and processes for addressing all hazards; and explains the general concepts of incident management. The ERP also identifies the responsibilities for the Emergency Response Team that provides leadership and guidance for the ERP.

#### ERP Annexes

The annexes provide targeted information, forms, and checklists to direct the activities of AC Transit staff participating in emergency response efforts. The following annexes are included in this Emergency Operations Plan, and are designed to be stand-alone documents useable by staff:

- Annex A: Emergency Operations Center Guidance and Forms
- Annex B: Emergency Operations Center Checklists
- Annex C: AC Transit Forms and Procedures
- Annex D: Miscellaneous Information, including authorities for emergency management

# Employee Training and Re-certification

All safety-sensitive bus transportation and maintenance staff are initially instructed on the operational and safety rules and procedures and are provided with Standard Operating Procedures and Rulebooks, as appropriate for their function.

## New Employee Training

New employees are required to attend a safety orientation and training module prior to beginning work. The purpose of the training is to review the contents of the job duties and to ensure a clear understanding of the safety and compliance requirements prior to performing work. Employees may be subject to periodic refresher training as needed. The New Employee Safety Orientation procedure contains the following checklist items:

- 1. The supervisor or management designee will be responsible for all new employee safety orientation and training
- 2. Upon completing orientation training, the employee's manager shall sign and date the New Employee Safety Orientation Training Checklist verifying training
- 3. Training includes safety, responsibility, compliance, communication, site orientation, and training
- 4. Trainee and trainer must sign off the New Employee Safety Orientation Training Checklist before new employee is permitted to work unsupervised
- 5. A copy of the completed New Employee Safety Orientation Training Checklist will be sent to the Safety Administrator

## Cybersecurity Training

The District has developed security-specific training to enhance the skills of the current staff and to set standards for future members of the district. Training can be obtained from classroom learning, online courses, or through self-instruction using a reference library. This ongoing training will better provide the staff with the skills necessary to meet corporate information security goals. Monthly newsletters provide up-to-date information on new cybersecurity initiatives, threats, and best practices.

## **Re-Certification**

Bus Operators receive annual training by qualified Training Instructors. The training process includes performance testing as well as supplemental training, based on accidents, or reported behaviors.

Transportation Supervisors and Controllers are also required to re-qualify annually. The process includes review of safety critical rules and procedures, particularly those that have a frequency of violation; new procedures or rules; written knowledge testing, and performance testing. Requalification may be also be required any time an Operator, Supervisor, or Controller performance record indicates a deficiency.

Training class logistics and critical safety topics are entered into the Training Database Application. The physical training record/document is sent to the employee's home division for record retention. All incidents or accidents are identified prior to class enrollment enabling corrective actions to be addressed/remedied during the training process.

# Safety System Inspections

AC Transit performs audits and inspections to ensure compliance with established safety programs. The following list provides activity examples to monitor safety assurance.

#### Safety Scheduled Activities

Safety System Task	Frequency
Oversee and assure SMS compliance	Daily
Random inspections of Departments for safety compliance (pre-trip inspections, driver files, maintenance records, etc.)	Quarterly
PTASP review, maintenance, and distribution	Annual
Facilities Inspection	Monthly
Employee safety training and testing and record keeping	Initial Hire/ Quarterly
Drug free workplace (policy maintenance, employee training and testing, etc.)	Initial Hire/ Quarterly
Driver license validity check and record maintenance	Initial Hire/ Quarterly
Administrative/Human Resource safety actions	As Needed
Safety and security data acquisition and analysis	Daily
Medical examination of drivers and record keeping	Initial Hire/ Quarterly
Vehicle and equipment procurement	As Needed
Pre-trip inspections and record keeping	Daily
Vehicle maintenance and record keeping	Daily
Safety inspections and record keeping	Annual
Event investigation and record keeping	As Needed
Investigate safety complaints	As Needed
Pre-employment screening	Initial Hire
Employee time recording and maintenance	Daily
Internal safety audits	Annual
Facilitate external safety audits	As Needed
Records maintenance, retention, and distribution	Daily
Self-certification of safety compliance	Annual
Intra-agency coordination and safety meetings	Quarterly

# Safety Integration and Coordination

## Safety Committees

The SMS Advisory Committee is represented on a variety of committees to facilitate the identification of hazards, the proper resolution of safety issues, and distribution of safety information. These include:

- Fire/Life Safety/Security Committee
- Bus Transportation and Maintenance Safety Committees
- Safety and Security Committee
- Accident Review Committees

## Safety Department

The Safety Department is responsible for the collection, maintenance, analysis, and reporting of safety data, achievements, and problems. The purpose of this activity is to determine the status and trends of safety conditions, and to monitor performance towards the established safety goal and objectives. This activity is accomplished through the conduct of the following steps:

- Define information requirements and sources
- Collect pertinent data from AC Transit departments
- Monitor safety conditions and performance
- Analyze safety-related data-system failures, accident statistics, accidents trends, etc.
- Report safety performance, achievements, and problems to the General Manager, Executive Directors, Directors, and other District managers

## General Counsel

The General Counsel's office is responsible for providing legal counsel, advice and litigation services to the District's Board of Directors and to the internal departments of the District. The General Counsel also oversees Risk Management and Claims Administration, Worker's Compensation and the Video Review Unit.

#### **Operations Department**

The Operations Department supports the District by providing safe, clean, and reliable public transportation service to the East Bay and other communities in our service area. Functions within Operations include Transportation, Maintenance, Training and Education, Operations Control Center, Service Supervision, Technical Services and Protective Services departments. The Operations Team provides leadership direction to nearly 2,000 front line employees and oversee operations and maintenance of over 630 buses, more than 150 non-revenue vehicles and 7 facilities located across the East Bay.

Team building, mentoring and motivating staff drives our success which is our focus. Asset and performance management in a safe and efficient manner is our priority. Our passion is to create

an environment that inspires and harbors creative and innovative solutions with a continuous improvement commitment. Our moto is "Relentless Leadership in Pursuit of Excellence"

#### **Operations Control Center**

The Operations Control Center Department is assigned the responsibility for managing the safe operation of buses, responding to emergencies and resolving issue which arise during the course of daily operations. Responsibilities include:

- Prepare and implement safe operating policies, plans, rules and procedures and submit them to the Director of Compliance and SMS Advisory Committee for approval.
- Revise safe operating policies, plans, rules and procedures when needed to reflect current operating conditions
- Monitor adherence to safety-related policies, plans, rules and procedures. Identify personnel, whose safety record requires follow-up, additional training, or discipline, including discharge.
- Report safety violations to the Safety Department
- Correct any condition, which has caused, or has the potential to cause, injury to persons
  or damage to property/equipment

#### Human Resources

The Human Resources Department is responsible for ensuring compliance with FTA drug and alcohol regulations during the hiring process.

#### Innovation and Technology Department

The Innovation and Technology Department coordinates with other departments, including the SMS Advisory Committee, to emphasize acceptable levels of data security. This includes the evaluating processes and providing roadmaps to remedy risks in the Cybersecurity and Data Governance Programs to ensure the data is accurate, consistent, secure, and aligns with overall organizational objectives. These safety activities include:

- Cybersecurity Governance
- Security Awareness Email Social Engineering
- Logical Security
- Physical Security Controls
- Threat and Vulnerability Management
- Third Party Risk Management
- Employee Management Security Awareness Training
- Data Protection
- Logging and Monitoring Security Information and Event Management
- Security Configuration Management

## **Planning & Engineering Department**

The Planning and Engineering Department coordinates with other departments, including the SMS Advisory Committee, to emphasize acceptable levels of safety in the engineering design of new equipment, facilities, and construction specifications on Capital Projects. It provides procedures that ensure vehicles and equipment, with defects or deficiencies are not placed into operation. Additionally, the Department is responsible for the supervision of contractor activities to ensure adherence to safety rules, procedures, and regulations.

## External Affairs, Marketing, and Communications

The External Affairs, Marketing, and Communications Department (Community Relations) provides information regarding AC Transit programs, operations, and events. With regard to safety, the department develops and conducts Outreach programs, that is, safety awareness programs and packages. These are provided to local schools, communities, citizen groups, media, and patrons. These programs and packages highlight the risks to safety and the need for safe behavior on or around AC Transit equipment and facilities.

#### Internal Audit Department

The Internal Audit Department has responsibilities for performing operational and compliance audits within AC Transit based on a risk assessment process. However, the Department may perform Drug and Alcohol Program audits of the District's contractors as well as other audits as requested by the SMS Advisory Committee or other District Departments.

#### **Contracts and Procurement**

The Contracts and Procurement Department, as part of the hazard management process, works with the SSES when issuing contracts to ensure that contractors are compliant with state and federal regulations and with AC Transit requirements. Contractors who may conduct safety sensitive work are identified and the information is shared with the Drug and Alcohol Program Coordinator for further review.

#### Safety Responsibilities of Other Departments

Managers and Supervisors in all departments and divisions are responsible for the prevention of accidents, identification of hazards, and resolution of such hazards. Reports of all accidents/incidents, deficiencies and defects will be maintained in the incident application which is available to the SMS Advisory Committee for review.

## System Start-Up and Testing

The District's Safety Management Systems Advisory Committee performs activities dealing with safety during the design, construction, testing and operational start-up phase in the Capital Investment Program. The process provides a structured framework within which testing must be

accomplished and will include general policy guidelines on the use of personnel. The Integrated test program includes the following activities:

- Review procurement specifications for inclusion of safety requirements
- Participation in Safety Design Reviews
- Job Hazard Analysis
- Audit acceptance test procedures for inclusion and satisfactory completion of tests, which assess compliance with safety requirements
- Develop and approve project specific certifiable items and manage the safety and security certification program;
- Assist in inspection of new facilities to ensure they meet safety requirements

#### **Training and Qualifications**

When new equipment is installed, personnel responsible for operating this new equipment must complete an orientation to familiarize themselves with the new installations. This orientation, conducted by the Contractor includes instruction, on-the-job training, and testing. The Safety Department and Human Resources Department shall maintain records of personnel training and certification.

#### Permits and Licenses

Permits needed for construction and operation of the system will be identified and the process for obtaining permits will be outlined in the final design. Tests, inspections, certifications and all required permits and licenses issued by local, State, and Federal agencies, must be included in the closeout documentation provided by the Contractor. Construction permits and code inspections, including Certificate of Occupancy, are obtained by the Contractor.

#### Safety Certification, System Start-up and Turnover

The Contractor shall apply controls to assure the safety, completeness, and operability of equipment and systems transferred from construction to operations, including provisions for turnover of portions of systems, equipment check-out, start-up, testing, warranties, and personnel training. Safety and Security Certification of Certifiable Elements in the System shall be performed in accordance with the latest revision of The East Bay BRT Safety and Security Plan.

#### Calibration, Functional Check-out, and Alignment

The contractor will conduct and complete calibration, functional checks, and alignment of operating systems such as signal prioritization, real-time passenger information signage and fare vending machines before formal acceptance.

# SAFETY PROMOTION

Each level of the District organization, from the Executive Office to individual District personnel is assigned responsibility for assuring the AC Transit service provides for the safety of the public and District personnel, in accordance with the PTASP.

# Safety Program Coordination

The General Manager has delegated the authority for the development, implementation, and management of the PTASP to the Safety Manager that is responsible for the coordination of the District's safety program and initiative efforts to improve the overall safety of transit customers, the public and employees. Specific responsibilities include:

- Develop and update the PTASP
- Coordinate and implement the PTASP
- Manage SMS Advisory Committee activities
- Support and coordinate District safety-related programs, activities, and initiatives
- Support and coordinate District emergency management activities with emergency response agencies impacted by District operations
- Monitor and evaluate safety related programs and activities at each District organizational level
- Train and test transportation personnel, both Bus Operators and Supervisors and Controllers and Dispatchers in the proper performance of safety-related operating policies, plans, rules, and procedures. Personnel are systematically trained, tested and certified in the proper performance of all safety-related rules and procedures. This applies to both normal and emergency conditions. Employees are provided with copies of safety and emergency rules, procedures, and policies that affect them. Employees must be re-certified on an annual basis.

## Safety Communication Channels

AC Transit has established communication channels to inform and educate employees, contractors, and passengers. Initial and ongoing training of District employees on the PTASP will become part of the safety culture and facilitate a continuous improvement process. Safety performance information is distributed through various internal publications and employee gatherings. Provided are examples that include but are not limited to the various information sources.

- ✓ Safety Bulletins
- ✓ Tailgate Meetings
- ✓ District Intranet

- ✓ Town Hall Meetings
- ✓ Digital Board
- ✓ Flyers/ Posters/ Read Boards

# Transit Asset Management Plan

AC Transit's Transit Asset Management Plan is a strategic approach in managing fleet and facilities; to optimize their performance; their useful life; and to minimize the total cost of ownership. AC Transit has developed a framework for asset management and implementing procedures in the form of a Fleet and Facilities Maintenance Plan. These Maintenance Plans will be used to monitor and manage assets to achieve and maintain a state of good repair, improve safety and increase reliability and performance as shown in the figure below. The purpose of these Maintenance Plans is to not only ensure that our assets are maintained in a state of good repair, but also help to enhance our operations by providing safe, frequent and reliable service.

## Fleet/ Facilities Maintenance Plan

AC Transit has developed the Fleet Maintenance Plan to monitor and manage assets to achieve and maintain a state of good repair, improve safety and increase reliability and performance. The purpose of the Fleet Maintenance Plan is to provide an overview of the Department's budget, structure, asset management, and maintenance programs. For all operating revenue and nonrevenue fleet assets, the Fleet Maintenance Plan addresses the following activities.

Fleet Activities		
Asset Inventory	Training	
Condition Assessment and Performance Measures	Vehicle Acceptance	
Condition Reporting	Decommissioning	
Organization Structure	Preventative Maintenance, Inspections and Cleanliness Activities	
Fiscal Budget	EAM and Work Control	
Replacement Schedule	Warranty Program	
Maintenance Program Structure	Capital Improvement Program	

## Maintenance Program

Maintenance and inspections of the District's operating systems must be effective to assure that all revenue and non-revenue vehicles and equipment operate as required, or in the event of failure or degradation of functionality, that operational safety is not compromised. This aspect of inspection and maintenance directly pertains to the safety of AC Transit customers, employees, emergency response agencies, the general public, and subcontractors of the District.

AC Transit's maintenance program is based on the original equipment manufacturers maintenance intervals as well as industry best practices. The program is designed to maximize the effective and efficient useful life of the District's bus fleet and facilities. The preventative maintenance inspections and scheduled standard tasks are the foundation of the District's maintenance programs.

The purpose of the program is to maximize the useful life of its fleet, buildings, infrastructure, and equipment through regular inspections, cleaning, maintenance and repairs. Equipment and machinery are periodically scheduled for service based on the original equipment manufacturers recommendations and/or industry best practices. The frequency and level of preventative maintenance service may vary based on equipment usage and coordination with other scheduled predictive analysis.

#### **Driver Vehicle Inspection Reports**

The Driver Vehicle Inspection Reports (DVIR) is a daily inspection referred to as a "Coach Pre-Trip Inspection and Defect Report" that requires operators to perform inspections defined by the California Code Regulations Title 13 and the Districts Operator User Guide. Several critical safety items are checked that include a brake and air loss test, as well as proper operation of other safety-related items such as horn, wipers, tires, and lights.

A DVIR form is provided to the operator prior to his/her shift and to be completed and returned as instructed by Transportation Department management. All DVIR's are communicated to the Maintenance Department and addressed. A combination of in-house designed supervisor repair control log, as well as Ellipse EAMS work orders are used to maintain repair structure and on-time servicing.

**Hold Cards** 



A hold card is used to identify an unsafe or unauthorized vehicle that was removed from service. This may be used in conjunction with or in lieu of a red tag. Hold cards may also be used to schedule maintenance for safety or reliability purposes.

# **Security Functions**

For traditional security functions as well as terrorism prevention, AC Transit's plans are based upon a formally adopted policy of awareness, alert observation and reporting by all employees, especially front-line personnel, combined with effective responses by both District Operations and first-responder law enforcement and emergency management organizations. AC Transit riders are also asked to report suspicious behaviors or packages to employees or call 9-1-1 in the event of an incident. The District's Security Department works in partnership with Police and Sheriff departments throughout AC Transit's service area for high responsiveness to calls for police on the transit system, for application of the District Code throughout the AC Transit service area, and for effective criminal investigations and prosecutions.

In support of security awareness and reporting by transit system employees, AC Transit design criteria for new service projects applies crime prevention through environmental design and provides Closed Circuit Television (CCTV) and other equipment to enhance security.

# Hours of Service

AC Transit has established and implemented an "Hours of Service" for the District's Bus Operators defined in the Collective Bargaining Agreement. The intent of the rules is to assure that operations and maintenance of AC Transit revenue vehicles are not placed at risk from the possibility of fatigue by employees. The rules apply to safety sensitive positions directly involved with revenue vehicle operation, maintenance, supervision, control and dispatching.

# **Rider Guides**

AC Transit provides rider guides for its customers as a general tool to use the District's bus service to provides for the safety of the public. Detailed information can be found on the AC Transit website to advise customers on safety precautions that include:



- ✓ Catching and boarding the bus
- ✓ Stopping and exiting the bus
- ✓ Accessibility
- Boarding bikes, strollers, and animals
- ✓ Proper riding etiquette

# Procurement Safety Standards

Procurement of new systems such as facilities, equipment, and rolling stock include safety requirements in specifications, design reviews, testing and configuration control. These procurements include consultation with the SMS Advisory Committee to ensure basic system safety principles.

- Consideration is given to the following safety requirements:
- Compatible with the existing AC Transit system safety features, design, and procedures.
- Incorporate "fail-safe" principles when failures would cause a catastrophe resulting in injury to personnel, damage to equipment, or inadvertent operation of critical systems.
- Avoid, eliminate, or reduce identified safety hazards by design change, safety devices, and parts or materials selection. Composition of hydraulic fluids, lubricants, and other materials shall provide optimum safety characteristics and fire-resistant properties.
- Location of equipment components so that access by personnel during operation, maintenance, repair, or adjustment activities shall not require exposure to hazards such as electrical shocks, burns, cutting edges, sharp points or dangerous or toxic materials.
- Design to minimize severe damage to equipment or injury to personnel in the event of an accident.
- Avoid undue exposure to physiological and psychological stresses, which might cause errors leading to an accident.
- Provide suitable warning and cautionary notes in instruction for operation, assembly, maintenance and repair, and distinctive markings for personnel protection on hazardous components, equipment, and facilities.

Contractors who provide systems, sub-systems, or equipment that affect safe transit operations or passenger/employee safety are required to establish and maintain a system safety program in accordance with an approved system safety program plan. The contractor's approved system safety program plan must define objectives, tasks, procedures, schedules, and data submittals for the safety activities that will be performed by the contractor. The Capital Projects and Facilities Departments approve the contractor's system safety program plans, with concurrence of the SMS Advisory Committee.

Additionally, all personal protective equipment to be used by District personnel are reviewed and approved by the Safety Department in accordance with respiratory, hearing conservation, or other applicable safety standards. Chemicals and other potential hazardous materials being considered for purchase and use are also reviewed and approved by the Safety Department and environmental compliance.

## Contractor Safety Coordination

AC Transit has established a safety management practices protecting the safety and security of employees, contractors and the public on project work activities. Construction safety is administered in accordance with the District's Capital Investment Program, contract specifications, and applicable federal, such as Occupational Safety and Health administration (OSHA), state and local safety requirements.

Project teams are committed to providing a safe and secure travel and work environment. Moreover, safety, accident prevention and security breach prevention must be incorporated into the performance of each task. Each Project team member is responsible for accident /security breach prevention reporting and for maintaining safety and security standards consistent with their position and organization function.

Through a cooperative team effort and systematic application of safety and security principles, projects will be designed and constructed to operate safely, securely, dependably, and efficiently. Industry best practices.

## **Regulatory Compliance**

AC Transit is committed to complying with all applicable local, state, and federal regulatory requirements, including the use and disposal of hazardous materials.

#### Occupational Safety and Health Program

The District is committed to the safety and health of its employees and contractors who work within the District's bus service. Accordingly, AC Transit has developed an Occupational Safety and Health Program and Construction Safety Program. The programs emphasize the recognition, evaluation, and control of hazards arising from the occupational and construction project environments.

The Occupational Safety and Health Program is directed toward achieving a safe working environment for employees and minimizing the likelihood of occupational related injuries and

illnesses. The program is based on and complies with applicable federal, state, and local safety codes and regulations. Procedures have been established for the control of operating hazards including, but not limited to, chemicals, noise, cut and abrasion injuries, and strain and sprain injuries.

On-the-job training of District employees is focused on hazard recognition and promotion of occupational safety and health practices. Attention is given to the need for, and proper use of, personal protective equipment and clothing as required by the work being performed. Routine comprehensive industrial hygiene surveys and industrial safety inspections are conducted to ensure that health and safety hazards in the workplace are identified and controlled.

#### Alcohol and Substance Abuse Compliance

The Alcohol and Substance Abuse Compliance Unit (ASACU) is responsible for promoting an alcohol and drug free workplace and environment for the health and safety of its employees and patrons, ensuring that the AC Transit District's Alcohol and Substance Abuse Program complies with the Federal Transit Administration (FTA) and Department of Transportation (DOT) regulations and collective bargaining agreements. The ASACU helps accomplish our mission by focusing on the following goals:

- Working proactively to help prevent accidents, injuries, and fatalities resulting from the misuse of alcohol and use of prohibited drugs
- The health and well-being of AC Transit employees
- Promoting a healthy and safe environment for employees and the public
- Compliance with FTA, DOT, Board policies, regulations, and contract language to mitigate risks, liability, and impact
- Promoting understanding, awareness and well-functioning business partnerships with the administration and compliance with drug and alcohol testing

#### Drug and Alcohol Policy

It is the policy of the Alameda-Contra Costa Transit District to provide a drug and alcoholfree workplace and environment for all employees and patrons. A drug and alcohol-free workplace protect this agency's most valuable resources - its employees as well as the health and safety of the public.

#### Administered Safety Tests

The following tests will be administered under FTA guidelines for all safety- sensitive employees, and under this Policy, for all nonsafety-sensitive employees:

	Safety-Sensitive	Non-Safety-Sensitive
(1) Pre-employment	X	Х
(2) Transfer to safety- sensitive position	-	х
(3) Reasonable suspicion	X	X
(4) Return to Duty	X	Х
(5) Post-accident	X	-
(6) Follow-up	X	x
(7) Random	x	2 (J. 1)
(8) DOT Biennial	x	-

### Hazardous Materials Program

AC Transit has established a comprehensive program for the control of hazardous materials used, including the disposal of waste materials. The District's Materials Department details the process for purchasing, receiving, and using hazardous materials within the AC Transit system. The Safety and Environmental Engineering Departments are responsible for reviewing all Safety Data Sheets (SDS) for chemicals and other potentially hazardous materials that are being considered for purchase and forward an approval for field use, including required protective measures. All employees who may use hazardous materials receive training from their Supervisors on the safe use and disposal of the products. Follow- up is conducted on the field use of approved products to ensure safe/proper handling methods are utilized.

Major laws and regulations that impact the Facility Maintenance Department are the Clean Air Act Amendments (CAAA) of 1990, Clean Water Act, Resource Conservation and Recovery Act (RCRA), and Environmental Protection Agency (EPA) regulations. The following activities apply to the program's regulatory compliance.

#### Hazardous Waste Management

Hazardous waste management is performed through implementation of proper procedures and internal inspections to ensure that all District facilities minimize and control the generation of hazardous waste and ensure disposal is in accordance with federal and state of California environmental regulations and local requirements.

#### Aboveground/Underground Storage Tank (AST/UST) Operations

In order to meet AST and UST operational and certification requirements, inspections and testing are conducted to verify all electronic monitoring equipment and tank components are functioning properly and ensure that all record keeping, and training procedures are implemented and maintained properly.

#### Storm Water Discharge Monitoring and Reporting

In accordance with California's Industrial General Permit for Storm Water Discharges, AC Transit regularly examines potential sources of pollutants in storm water discharges during monthly yard walks and inspections. We continue to address challenges with operating under benchmark levels through better training and education.

#### Wastewater Discharge Monitoring and Reporting

The wastewater regulatory compliance activities are tracked and reported regularly as part of our suite of environmental compliance requirements. Wastewater samples from all facilities are collected and analyzed throughout the year in accordance with permit requirements.

#### Air Emissions Permitting Activities

AC Transit maintains several air quality permits through the Bay Area Air Quality Management District (BAAQMD). The permits include those for five dispensing facilities

and other emissions sources such as diesel-operated fire pumps, backup generators, and paint booths.

#### Hazardous Materials Plans

AC Transit maintains Hazardous Materials Business Plans and Spill Prevention, Control, and Countermeasure (SPCC) Plans, primarily for fuels and oils, and manages hazardous waste generated in accordance with federal, state, and local guidelines. The bulk of the waste generated is waste oils and coolant, oily rags, and other maintenance related items that typically get recycled. AC Transit conducts proper storage, labeling, and handling of these materials, and conducts frequent inspections and maintains employee training and records in accordance with regulatory requirements.

#### Example of Response Procedure

