CITY OF LOS ANGELES

INTER-DEPARTMENTAL MEMORANDUM

Date: June 8, 2021

To: The Honorable City Council
c/o City Clerk, Room 395
Attention: Mike Bonin, Chair, Transportation Committee

From: Seleta J. Reynolds, General Manager
Department of Transportation

Subject: **AUTHORITY TO ADOPT THE FEDERAL TRANSIT ADMINISTRATION'S (FTA) MANDATED AGENCY SAFETY PLAN**

SUMMARY

The Los Angeles Department of Transportation (LADOT) is requesting a formal certification of and the authority to implement its Agency Safety Plan (ASP) for bus operations as mandated by the Federal Transit Administration (FTA) for every large rail and/or bus agency in the United States under federal Rule PART 673—PUBLIC TRANSPORTATION AGENCY SAFETY PLANS. The FTA will begin enforcement of LADOT's Safety Plan starting July 20, 2021.

RECOMMENDATION

That the City Council, subject to the approval of the Mayor, Adopt and certify the attached Safety Plan prior to July 20, 2021, as required by the State of California Department of Transportation (Caltrans) and FTA regulations, which authorizes the General Manager of LADOT to continue to apply for and receive federal formula grant funds as well as discretionary grant funds to continue to purchase alternative fuel and electric buses and the facilities to maintain and charge them.

BACKGROUND

LADOT runs one of the largest bus fleets in the State of California. As a transit operator in Los Angeles County, the LADOT received FTA grants since 2003 and adheres to FTA and TSA mandates to maintain its funding eligibility. The FTA provides capital funding for buses and maintenance facilities in the form of 5307 formula grants and other discretionary grants, and an Agency Safety Plan is required to continue to receive and sustain these funds.

DISCUSSION

The Agency Safety Plan, provided herein, identifies key actions and behaviors to maintain current safety practices while enhancing and developing new hazard-mitigation programs for DASH, Commuter Express, Cityride, and other services. Safe public transit for local communities has always been a priority for LADOT, and the new procedures will enhance the safety protocols already in place for the bus fleet and operators.

A Safety Measurement and Management System (SMS) is the national standard for safety assurance. Initially pioneered by the Federal Aviation Administration for airlines, federal, state, and local governments as well as major private industries have since adopted the SMS-based Safety Plans as mandated. LADOT prioritizes safety and the SMS will identify and mitigate risk in public transportation.

Innovations in LADOT's safety plan and SMS include the implementation of hazard reporting systems for bus operators and patrons. Every reported potential hazard from the public or employees will be identified and modeled through the SMS system to determine its probability and severity, and will be remediated based upon a score provided by the SMS protocol. This systemization takes away ambiguity and subjectivity, pushing our bus system toward maximum possible safety for riders, operators, and pedestrians.

FISCAL IMPACT

There is no impact to the City's General Fund. Certification of the ASP is required to continue bus and facility capital purchases through the use of federal grant funds, thereby eliminating or strictly minimizing the expenditure of City funds.

SJR:JK:bl
Attachment

LADOT TRANSIT AGENCY SAFETY PLAN

Federal Transit Administration

DEPARTMENT OF TRANSPORTATION

AGENCY SAFETY PLAN

With our Partners in Safety

MV TRANSPORTATION, INC.

SCAG

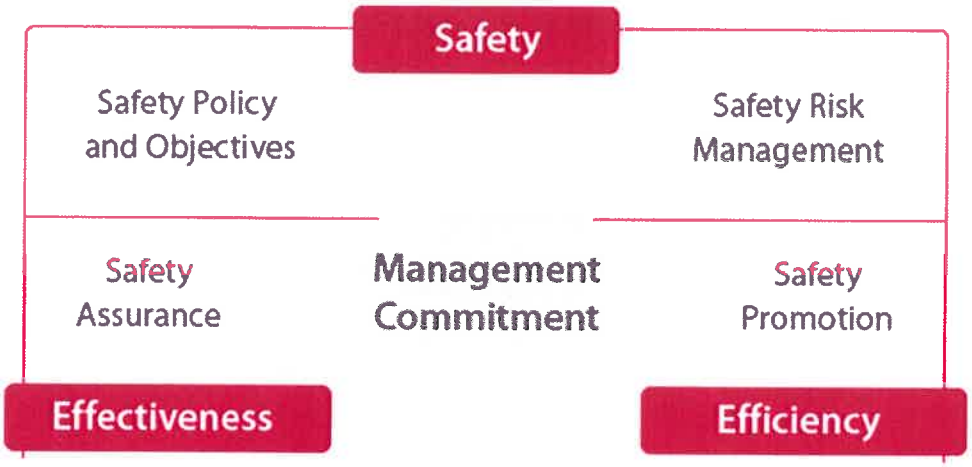
INNOVATING FOR A BETTER TOMORROW

Table of Contents

Introduction

Safety is instilled into our culture, from top to bottom. It's everyone's job. It starts in hiring and procurement, and continues as the most important part of our every-day work. This document sets the tone, and lays out how we intend to incorporate the four principles of SMS into our every-day operations. The following is formatted in accordance with the federal template to increase clarity. Our goal is to manage risk to make our chances of success as great as possible while making chances of failure, injury and loss as small as possible.

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



SMS components include safety policy, risk management, safety assurance and promotion. SMS is used in the United States in nearly every industry. Its roots are in aviation. While the rest of this document goes into great detail on how to carry out an SMS, it may be worth a few lines to say what it is and what lies at the core.

This, plainly, is maturity in human/mechanical interactions. For airliners there was a culture that said, "The Captain is in charge of safety." This led to countless catastrophes. Who is in charge of safety? The answer is everyone, including pilots, co-pilots, officers, crew, etc. SMS is about the greatest number of eyes and ears focused on a problem. It's a mandate, an unequivocal demand by the FTA to treat safety as everyone's concern. Worries over procedure, reporting, who is the boss, who may be offended—all this has to go out the window. The person responsible for safety is you. Maturity in this sense, means management listens and responds to drivers, mechanics, riders. It doesn't mean these people will always be correct, but it does

mean that the concern should be immediately and completely evaluated in mandated ways that leave no doubt as to the outcome. It's either deemed actionable, or the accountable person accepts responsibility for inaction. Egos and 'who's in charge' are thrown out the window.

The Four Components of SMS

- **Safety Policy:** Establishes senior management's commitment to continually improve safety; defines the methods, processes, and organizational structure needed to meet safety goals.
- **Safety Risk Management:** Determines the need for, and adequacy of, new or revised risk controls based on the assessment of acceptable risk (applicable to products, processes and organizational decisions).
- **Safety Assurance:** Evaluates the continued effectiveness of implemented risk control strategies; supports the identification of new hazards.
- **Safety Promotion:** Includes training, communication, and other actions to create a positive safety culture within all levels of the workforce.

This document will strive to identify key actions and behaviors to make our system even safer by using what we have and developing new knowledge and actions to create safer operations. It will start with the basics in order of the FTA template, and following that as closely as possible. There is a degree of overlap in sections. As each section is able to stand alone, some information may be repeated.

Agency Information

City of Los Angeles, Department of Transportation. Our Transit bureau functions as a transit agency. We are located at 100 S. Main St. 10th floor, Los Angeles, CA 90012

Our accountable executive is Jay Kim Assistant General Manager, designated by Seleta Reynolds, General Manager.

Chief Safety Officers are Otamez Haddock and Chuck Hammerstein. Chuck has attended nearly all FTA and TSA safety courses offered over the last decade. He's served as a safety officer and training coordinator for LADOT transit since 2015. Has participated in de-escalation training for bus drivers along side LAPD officers. Also supervised officers in the field.

Prior to a career shift to public administration, Chuck served as an armed body guard for the CEO of Western Bancorp, as well as various stints within Western Bancorp in armed transport of cash, negotiable bonds and securities. Also deployed as a hostage mitigation expert related to Middle East terror issues in the late 1970s.

Otamez has an exemplary military background, having served a total of 10 years in the United States Navy initially as an Airman, Aviation Store Keeper (AK3), and lastly promoting to the rank of Personnelman (PN2). She has a Masters degree in Information Technology, and Bachelor of Science in Criminal Justice in Forensic Science.

Military and law enforcement experience includes serving as an LADOT Traffic Officer for many years. For the Navy (10 years), she was deployed overseas, having earned numerous deployment ribbons and a medal for aviation warfare.

Modes Provided

Modes of service covered in the plan are Motor Bus (DASH), Commuter Bus (Commuter Express), and Paratransit (CityRide).

Federal Funding for Buses: Each of our modes receives 5307 funds for the buses themselves. We also receive 5307 funds for maintenance facilities.

Contracted Out Bus Operations

Our bus operations are 100% contracted out. Currently all of the services are contracted to one contractor, MV Transportation, Inc. The LADOT Agency Safety Plan incorporates MV's Safety Plan, particularly in the details of carrying out the plan's directives. LADOT recognizes that it holds the ultimate responsibility for assuring that MV complies with all provisions in CFR Part 673.

As presented now, LADOT's plan simply contains content from MV where applicable.

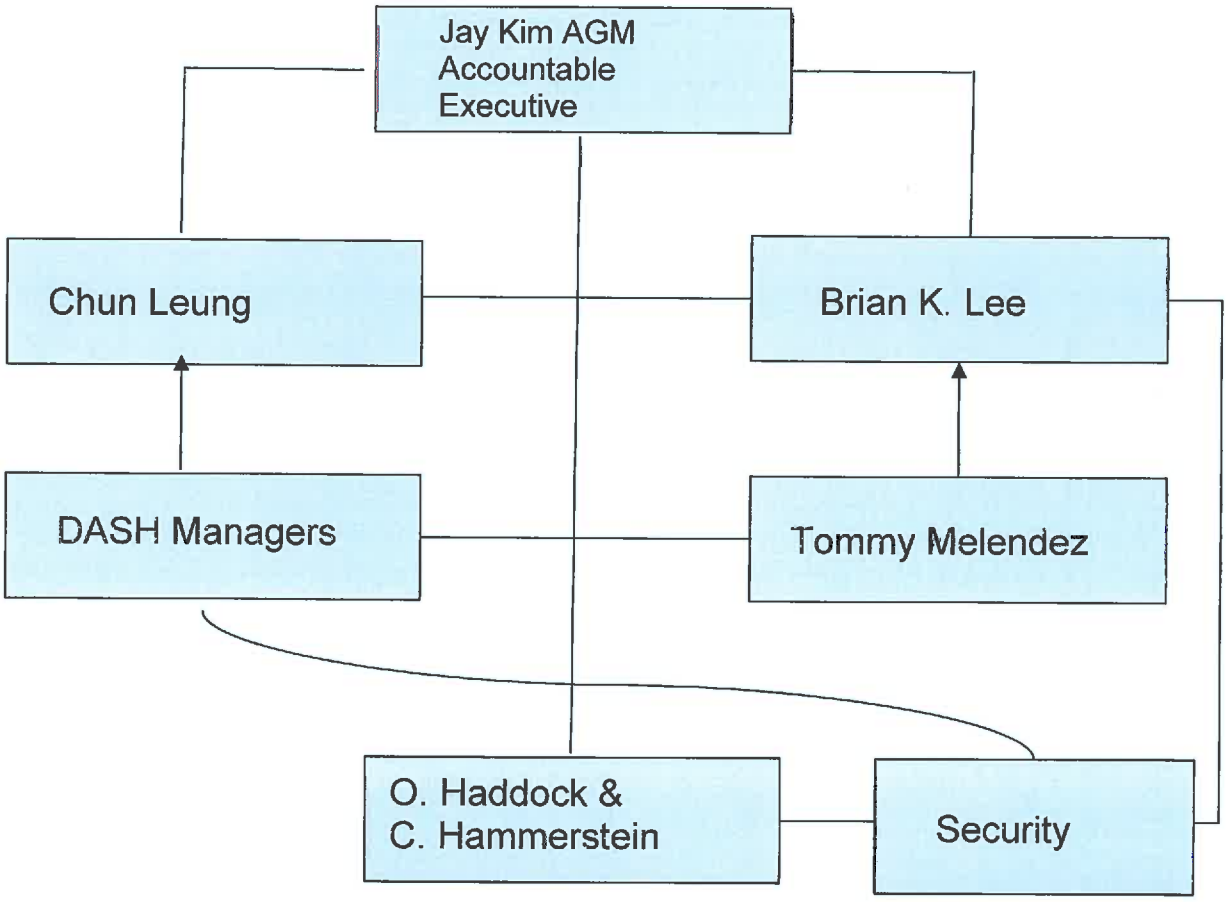
MV's Safety Plan also stands on its own. While MV carries day-to-day responsibility for implementation, LADOT monitors results and works with MV in developing and implementing safety improvements. MV's ASP also stands alone, but is incorporated here where applicable

Accountable Executive

Jay Kim, on behalf of the General Manager, Seleta Reynolds will be our Accountable Executive. Seleta is in charge of *all* department functions from parking enforcement, roads, engineering and many others. Jay Kim is the executive *specifically* in charge of all mobility management which includes transit services. Jay Kim, per Part 673 has the power to address budget concerns and leverage other LADOT divisions such as Street Engineering to affect safety issues such as red curbs, signage and so on.

Role of the Accountable Executive

The accountable executive will become involved when a safety recommendation has gone through the risk assessment process with a recommendation to implement, but cannot be routinely implemented due to lack of resources, indifference, laziness, inertia, or any other reason. The executive will either sign off on the risk, accepting 100% responsibility for not implementing it, or the executive will cause the recommendation to become reality through resource allocation, orders to carry out the work. He or she will 'make it happen' through direct action verbally and/or in writing. The concept of a 'mature attitude' towards safety means accepting responsibility and being accountable.



Role of the Chief Safety Officer

This individual is in constant contact with the bus operations contractors, interfacing with training operations, providing supplemental training when needed, and monitors safety of mechanical work, driver training, driver performance. Also observes traffic, signage or painting or lack thereof that is causing a safety concern. In addition to reporting to FTA all safety statistics, the CSO will make sure that identified hazards through reporting systems, driver statements, police officer observations and so forth are run through the risk management assessment and mitigated when necessary. If such mitigations cannot be done, the accountable executive will accept the risk or fix it.

Plan Presentation to Accountable Executive and Approval by City Council

This plan will be presented to the Accountable Executive prior to April, 2021. It will go to Los Angeles City Council in the month of June, 2021. A Memo will be sent to the Accountable Executive and a meeting will be scheduled to let the individual know what the role entails. Our accountable executive, Assistant GM Jay Kim has been verbally informed by the Chief Safety Officer.

Following further meeting(s) and elaboration of roles, the ASP will go to City Council. Jay Kim has control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan in accordance with 49 U.S.C. 5326.

In addition to the above, the plan will be reviewed and updated annually by the same individuals following the same time line each year.

Transit Provided for Outside Entity

We provide service to the County of Los Angeles for a select few areas of very limited areas of County-unincorporated areas bordering Los Angeles.

Recognition of Federal Source of Regulations

We recognize and certify that this draft is in accordance with 49 CFR Part 673, which can be found in Appendix C. We understand this adherence is mandatory, the FTA sets the rules, and we either follow the rules or risk losing funding

Plan Development, Approval and Updates for LADOT

Name of Entity That Drafted This Plan	The City of Los Angeles, Department of Transportation, Grants Section, Safety and Security	
Signature by the Accountable Executive		Date of Signature
Approval by the Board of Directors or an Equivalent Authority	Name of Individual/Entity That Approved This Plan	Date of Approval
	General Manager, Seleta Reynolds, followed by City Council (below)	
	Relevant Documentation (Title and Location)	
Certification of Compliance	***Name of Individual/Entity That Certified This Plan*** Los Angeles City Council	Date of Certification
	Relevant Documentation (Title and Location)	

MV and LADOT Approval and Updates

Name of Entity That Drafted This Plan	MV Transportation and LADOT will each utilize this form.	
Signature by the Accountable Executive	Signature of Accountable Executive	Date of Signature
Approval by the Board of Directors or an Equivalent Authority	Name of Individual/Entity That Approved This Plan	Date of Approval
	Relevant Documentation (title and location)	
Certification of Compliance	Name of Individual/Entity That Certified This Plan	Date of Certification
	Relevant Documentation (title and location)	

Version Updates MV and LADOT

Version Number and Updates

Record the complete history of successive versions of this plan.

Version Number	Section/Pages Affected	Reason for Change	Date Issued
Original	All	Creation	10/2019
2	All	Edits from FTA PTSAP contractor	2/21/21
3	All	Edits and updates from FTA	4/30/21

Annual Audit and Review of Plan

Update and review will take place at least annually, commencing in July, 2021. Each year the

ASP will be reviewed to see that it addresses all applicable requirements and standards as set forth in the FTA's Public Transportation Safety Program.

Safety Performance Targets

Safety Performance Targets LADOT

Specify performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. All targets based on one-million VMT.

Mode of Transit Service	Fatal Total	Fatal Rate	Injuries (Total)	Injuries (Rate)	Safety Events (Total)	Safety Events (Rate)	System Reliability
MB-recent avg.	<1	.01	12	.521	12	.521	>5%+
MB-Target	<5%	<5%	<5%	<5%	<5%	<5%	>5%+
*Paratransit	0	.0	0	0	0	0	>5%+
*Commuter Bus	0	.0	0	0	0	0	>5%+

- **Note paratransit and commuter bus have zero fatalities and injury rate statistically insignificant. WC lift non-injury incidents for paratransit should be reduced to zero. As it stands now there are near zero, but occasionally we have a wheelchair slip or fall.**

Safety Performance Targets MV

Safety Performance Targets *Specify performance targets based on the safety performance measures established under the National Public Transportation Safety Plan.*				
Mode of Transit Service	Preventable Accidents per 100K miles	NTD Recordable Accidents	Employee Injuries per 200k hours	
Paratransit	**0.90**	0	8	
MB	**0.951**	0	8	
Mode of Transit Service	Miles Between Road Calls	PMI OTP %	Number of Vehicles OOS	
Maintenance	10000	100	0	

Safety Performance Target Coordination

Describe the coordination with the State and Metropolitan Planning Organization(s) (MPO) in the selection of State and MPO safety performance targets.

SCAG is not required to establish regional safety performance targets until one year after the operators have established their agency safety targets. SCAG will engage with the operators on target setting through our Regional Transit Technical Advisory Committee. The State of California, after receiving feedback from the MPOs from the webinar and phone conference, the consensus was to select a target line of reaching zero fatalities by 2050.

Targets are based on empirical evidence of the selected interventions' "Previous effectiveness combined with best estimates of future effectiveness, using a model linking inputs and outcomes" (Performance Management Practices and Methodologies for Setting Safety Performance Targets, Federal Highway Administration, 2011). Since safety performance targets pertain to all public roads, in a practical sense for this to work, local jurisdictions need to develop individual performance measures based on the particular needs of the locality and also target the appropriate strategies. If regional implementation is adopted, this denotes a bottom-up approach where targets are rolled up from the State and local jurisdictions based on safety effectiveness, supported by research, and are more realistic and achievable.

Targets Transmitted to the State	Caltrans	Date Targets Transmitted
	TBD	June 1, 2021
Targets Transmitted to the Metropolitan Planning Organization	Metropolitan Planning Organization Name	Date Targets Transmitted
	Southern California Association of Governments (SCAG)	April 09 2021 Draft June 01 2021 Final

Safety and Risk

Safety is actually risk management. Overconfidence, complacency or arrogance in the belief that we are already as safe as we can be; is more dangerous than deliberately accepting, searching for, and ***mitigating*** risk. This is further elaborated upon in the section Risk Management. The task of mitigating risk can be seen on paper through risk analysis, but in practice, risk mitigation includes identifying hazards, reducing them, or accepting them as nominal.

Hazards are things not done, existing or developing stuff in the environment. People are not hazards, but some behaviors can be hazardous. Training mitigates risk, and that in turn is passed on to the bus driver who sees hazards and mitigates external risks constantly. Risks, as fully elaborated below, can be almost anything interfering with safe operations. Obvious things are mechanical or engineering weaknesses in bus build or traffic signage signals, markings etc.

In the org chart on page 9, each person has an important role. The head heavy-duty equipment mechanic has a key role in equipment and inspections of that equipment. He and his staff assure that equipment will not be a contributing cause or root cause of a failure. Others, primarily at MV are responsible for training. Operations managers will sometimes feel encroached upon by safety and mechanical personnel. A certain dynamic of tension is desirable.

Acronyms

AB Assembly Bill Legislation that originates in the California assembly.

ADA Americans with Disabilities Act Federal act that requires equal accessibility for persons with disabilities.

ASP Agency Safety Plan mandated by the FTA. For bus and rail.

AQMD Air Quality Management District

ARB Air Resources Board (California) California agency responsible for protecting the State's air.

APTA American Public Transit Association

CAAA Clean Air Act Amendments The federal law that sets air quality standards for the nation, including procedures for meeting these standards and penalties for non-compliance.

CALTRANS California Department of Transportation (Caltrans) is primarily responsible for the planning, design, construction, maintenance, and operation of the State's transportation system.

CCAA California Clean Air Act The State law that sets air quality standards for California, including procedures for meeting these standards and penalties for non-compliance.

CEQA California Environmental Quality Act The law that requires an assessment of the environmental impact of specified governmental actions, including procedures for making determinations.

CIP Capital Improvement Program Jurisdictions and agencies prepare a Capital Improvement Program (CIP) which forecasts capital improvement needs, revenues and expenditures over a period of time varying from two to up to ten years.

CMA Congestion Management Agency Under Proposition 111, passed in 1990, each county with an urbanized population of 50,000 or more was required to designate a CMA to perform specified duties to better integrate transportation, land use, and air quality.

CFR Code of Federal Regulations

CMAQ Congestion Mitigation and Air Quality A funding program provided under Federal transportation legislation that targets a certain portion of Federal transportation dollars to projects that reduce congestion and/or improve air quality. PCTPA programs these funds through SACOG.

CO Carbon Monoxide A colorless, odorless, poisonous gas emitted by vehicle combustion.

CNG Compressed Natural Gas

CTC California Transportation Commission A nine-member board, appointed by the Governor, that governs the State Transportation Improvement Program and other specified transportation funding programs.

CTSA Consolidated Transportation Service Agency A designation conferred by the Regional Transportation Planning Agency on a transit provider to coordinate and consolidate the efforts of the county's paratransit providers. The CTSA is eligible to receive Transportation Development Act funding. DOT Department of Transportation The federal department responsible for transportation programs established by Congress.

EIR Environmental Impact Report An environmental document prepared to comply with the California Environmental Quality Act that provides an assessment of the environmental impacts of a proposed governmental action, as well as mitigation measures and findings.

EIS Environmental Impact Statement An environmental report that documents the actions and processes implemented to comply with the National Environmental Protection Act. The Environmental Impact Statement (EIS) is required for any project involving federal funding.

EPA Environmental Protection Agency The federal agency responsible for environmental protection and environmental programs established by Congress.

FHWA Federal Highway Administration The federal agency charged with overseeing compliance with federal requirements for highway projects. The FHWA also acts as a conduit to other federal agencies, such as US Fish & Wildlife, Army Corps of Engineers, and US Environmental Protection Agency, on transportation related permits, air quality conformity, and environmental documents.

FSP Freeway Service Patrol A Freeway Service Patrol (FSP) is an umbrella term for a variety of programs implemented by government agencies, typically state Highway Patrols or Departments of Transportation, to reduce traffic congestion and improve highway safety by having specially marked and equipped vehicles patrol designated sections of roadway and provide incident management and motorist assistance.

FMCSA Federal Motor Carrier Safety Administration

FMSR Federal Motor Carrier Safety Regulations

FTA Federal Transit Administration The federal agency charged with overseeing compliance with requirements for federally funded transit projects.

FY Fiscal Year Begins July 1 of each year and ends June 30 the following year.

HOV High Occupancy Vehicle A passenger vehicle with 2 or more occupants sometimes referred to as a carpool.

(STIP). ITIP Interregional Transportation Improvement Program The portion of the State Transportation Improvement Program that is controlled by Caltrans. ITIP funds are used by Caltrans to fund and construct projects of statewide importance on the state highway system.

ITS Intelligent Transportation Systems Refers to techniques that use technology to improve transportation safety and mobility.

LTF Local Transportation Fund A funding source provided under the Transportation Development Act and administered by the regional transportation planning agency, for jurisdictions to operate local transit systems. The LTF is funded by 1/4% of the statewide sales tax, returned to the county of origin. MPO Metropolitan Planning Organization A federally designated agency that provides transportation planning and programming and other duties as specified for federal programs for a metropolitan area, as designated in the federal census.

MTIP Metropolitan Transportation Improvement Program A federally required document which lists federally funded and "regionally significant" transportation projects over a four-year horizon. This document is then used to demonstrate air quality conformity, which is required for a transportation project to proceed.

NEPA National Environmental Protection Act The federal law which outlines the processes required to determine the environmental impact of federal projects. NHS National Highway System. The National Highway System consists of 163,000 miles of interstate highways and major primary roads.

OWP Overall Work Program

PS&E Plans, Specifications and Estimate This component includes all work to develop contract plans, specifications engineer's estimate, and contract bid documents, allocation of funds, contract award, and contract approval. In addition, environmental commitments must be resolved.

PSR Project Study Report Project Study Reports (PSRs) are engineering reports whose purpose is to document agreement on the scope, schedule, and estimated cost of a project so

that it can be considered for inclusion in a future programming document such as the STIP. PSRs are prepared for State highway projects. PSRs are also used by Caltrans for certain projects funded under the State Highway Operation and Protection Program (SHOPP) and for certain locally funded projects on the State highway system. RFP Request for Proposal A Request for Proposal (RFP) is an early stage in a procurement process, issuing an invitation for suppliers, often through a bidding process, to submit a proposal on a specific commodity or service.

RIP Regional Improvement Program Regional Improvement Program, funded through 75% of new STIP funding and subdivided by formula into county shares.

R-O-W Right-of-Way Right-of-way is a strip of land granted for a transportation facility. It can also refer to legally granted access for a public throughway.

RSTP Regional Surface Transportation Program One of the funding programs included in the federal transportation legislation. RSTP funds are the most flexible funding pot, and can be used for most transportation purposes. RTIP Regional Transportation Improvement Program A programming document adopted by the regional transportation planning agency

RAR - Risk Assessment Report

RFP - Request for Proposal

RIF - Risk Information Form

RMIS - Risk Management Information System

RMP - Risk Management Plan

RTR - Risk Tracking Report

(RTPA) Designates the projects and amounts to be funded by the county's share of Regional Choice funding. Every two years, the RTIPs from California's 58 counties, along with Caltrans ITIP, are adopted into the State Transportation Improvement Program

(STIP). RTP Regional Transportation Plan A state required transportation planning document that inventories existing transportation systems, forecasts needs, and designates a funding-constrained list of projects for a 20 year horizon. This document is prepared by PCTPA. RTPA Regional Transportation Planning Agency A state designation for the countywide agency charged with certain tasks under California law, including administration of the Transportation Development Act, adoption of the Regional Transportation Improvement Program, and adoption of the Regional Transportation Plan.

SAFE Service Authority for Freeway Emergencies A Service Authority for Freeway Emergencies administers a freeway callbox program.

SMS Safety Measurement System aka, Safety Management System--originally developed for airlines; it is the national nomenclature for safety risk management.

SOV Single Occupancy Vehicle A vehicle with a driver only, and no additional passengers. SRTP Short Range Transit Plan A document that assesses the existing conditions for a transit system, projects short term (usually five year) demand, and outlines a plan for meeting those needs.

STIP State Transportation Improvement Program The programming document that is adopted every two years by the California Transportation Commission to designate the projects, schedule, and funding amount for the state's portion of the federal gas tax funds.

(TDM) Transportation Demand Management and Transportation Systems Management (TSM), these describe techniques to reduce congestion and air quality problems by encouraging people to use alternative transportation or carpools.

TSM Transportation System Management Strategies designed to improve the efficiency and effectiveness of the existing transportation system.

USC - United States Code of law.

VMT Vehicle Miles Traveled Unit of measurement of how far a vehicle or vehicles have traveled in a day, month or year.

VHT Vehicle-Hours of Travel

VIDS Video Incident Detection System

VIN Vehicle Identification Number

VIP Video Image Processing

VM Vehicle-Miles

VMS Variable Message Sign

VMT Vehicle-Miles Traveled/of Travel

VO Vehicle Occupancy

VOC Volatile Organic Compounds

VPD Vehicles Per Day

VPH Vehicles Per Hour

VPHPL Vehicles Per Hour Per Lane

YTD Year-to-Date Year-To-Date (YTD) represents the period starting January 1 of the current year and ending today.

ZEV Zero Emission Vehicle A vehicle that produces no tailpipe pollutants. Electric vehicles and fuel cell vehicles are considered ZEVs

Definitions and Sources of this Safety Plan

Glossary

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

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

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

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

Public Transportation Agency Safety Plan means the documented comprehensive agency safety plan contained herein required by 49 U.S. C. 5329 and 49 CFR 673

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

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

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

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

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

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

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

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

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

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

Safety performance target means a Performance Target related to safety management activities. Safety Promotion means a combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.

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

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

State Safety Oversight Agency means an agency established by a State that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth in 49 CFR part 674. CPUC is Metro's State oversight agency.

Transit agency means an operator of a public transportation system.

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

System Reliability

This section comes before the rest of the document because we want it to be an underlying reality. Reliability and good maintenance practices support the safety of our fleet in the most fundamental ways. Brakes, steering, tires, suspension, fire suppression functionality should be given and provide the foundation upon which we build. We will track the mean distance between major mechanical failures by mode. Currently this data is compiled by Transtrack. Our Head of Maintenance, Tommy Melendez is in charge of inspections and assurance of adhesion to our

maintenance manual, and those of the respective manufacturers of vehicle chassis and powertrain.

As part of the safety plan, data from mechanical inspections and oversight of MV transit's maintenance on LADOT buses will be utilized as a source of potential hazards to be mitigated by methodology described later in this plan. While mechanical failures per se (due to our already rigorous controls) generally don't comprise a single safety risk; combined with other factors subtle deficiencies may contribute in unknown ways to risks normally associated with road conditions or driver error. For example, a poorly aligned wheel may throw the bus's steering off just enough to cause the bus to respond poorly to an emergency maneuver. The poorly aligned wheel could go unnoticed or could come into play in an incident triggered by a traffic condition, driver fatigue or a wide number of variables. In summary, many safety incidents or collisions have multiple causes and roots. It is our job to root out each potential contributing factor to a single incident. A hazard can exist on its own and be mitigated to the point where it does not result in a risk. Or a single hazard may combine with other hazards to form a definite risk. Our risk management team stands between hazards and negative results. As many risks as possible are identified and mitigated to avoid them leading to loss of property, injury or death. A risk may be avoided, reduced, accepted or transferred.

Safety Management Policy

Policy defines our approach to safety. Our Safety Management System (SMS) is a systematic, explicit and comprehensive process for the management of safety risks that integrates operations and technical systems with financial and human resource management, for all activities related to bus transit.

Critically, it is important to understand that to manage safety it is not necessary to have a sophisticated 'philosophy' of safety management. Having a good academic knowledge of safety is useful, but knowledge alone does not promote safety. Some of the more esoteric knowledge presented later helps management understand the broad picture, but everyday safety, accident prevention takes place in the garage, in traffic engineering, and on the street in the bus.

Behavior actually prevents accidents and saves lives. In pursuit of this principle it should be recognized that polished written documents constituting a good on-paper SMS are important, but not critically important. The ultimate critical goal is to change behavior and circumstances of front line workers.

A safety system is a business-like approach to safety. In common with all management systems, a Safety Management System provides goal setting, planning, and measuring performance. Here we define how we intend to manage bus safety as an integral part of business management activities. A Safety Management System must build upon, evolve, and focus on what LADOT already does with its excellent and safe bus system.

The core of the system now mandated by the FTA includes an executive in charge who will provide the authority to instill a top-down culture of safety. This executive is independent of the operations and maintenance sections to assure autonomy and objectivity. When hazards are identified the executive-in-charge either accepts the risk as is, or works with the chief safety officer to implement agreed-upon changes.

Our safety management policy is mandated to include proactive as well as worthwhile traditional reactive approaches. It is based on actual implementation out on the streets, and not compliance, or having an impressive document for compliance's sake. A large part of management's job is to get out in the field and see what's actually going on.

Traditional safety management reacts to incidents, collisions and accidents. In addition to this we will strive to prevent accidents in the first place. This means that safety takes a pre-eminent role in decision making before all other considerations. All levels of management and all employees are accountable for the delivery of safe bus operation. This includes Investigating accidents, incidents, fires, and occupational injuries. Personnel must analyze, evaluate and resolve/mitigate hazards and near misses.

SMS (in addition to useful reactive activities) takes an additional *proactive,* preventative approach, identifying and correcting hazards before they lead to a problem. A traditional approach might be to compartmentalize or minimize near misses, poor judgement, equipment failures and so forth. SMS calls for bringing hazards and potential hazards out in the open in a non-judgmental way so failures or near failures can be prevented in the future.
The LADOT SMS incorporates the following components which expand upon the basic precepts above. We have a process for both reactive and proactive practices. When accidents or incidents indicate a possible rule or procedural contribution, it is our intention to call it out. In addition, any bus system employee can propose a rule or procedure modification. Everyone is in charge of safety and can talk to anyone about it without fear of censure.

We'll have new processes for identifying changing or developing hazards to passenger and pedestrian safety and for evaluating and managing the associated risk. This involves thinking about things that may cause future incidents. For example, worn or missing red-curb bus zones, street damage, new construction, hazardous road conditions, malfunctioning signals, bus mechanical issues, social issues with encampments or intoxication. There are many more similar things going on at all times, and management or police can't possibly identify all new hazards.

The shift here is that all employees, top to bottom become responsible for safety. The process for internal, non-punitive, reporting and analyzing of possible future hazards, current hazards, near-incidents and near-accidents comes into play here. Taking corrective actions in a timely manner can stave off actual future incidents. In support of the related policies featured above; employees need simple, effective tools to report hazards, such as:

- Email reports feeding into a centralized database;
- Traditional phone-based hotline
- Mobile apps for employees reporting hazards; and
- Crowd sourcing of immediate and long-term hazards
- Bulletin Boards (already in use)
- Employee newsletters

Further elaboration of the above is found later in Continuous Improvement and other sections. These later segments of this plan are concerned with field implementation of the concepts approached more academically upfront.

We must promote and maintain a culture of open reporting of all safety hazards, ensuring that no action will be taken against any employee who discloses a safety concern through the proper chain of command. This includes establishment and use of training based on every-day events and observation as well as analysis of near misses, and actual collisions or incidents.

We will develop a process for setting goals for improvement of Bus Safety and for measuring the attainment of those goals. Ensuring that personnel are trained and competent to perform their duties is also critical. Regular and ongoing support for safety training and awareness programs include providing and promoting the necessary resources to support the above.

On an ongoing basis, involve all LADOT employees and MV personnel with appropriate safety and security information and skills training; ensure employee and contractor competence in all safety matters related to their position with the company. MV remains responsible for their basic operator safety training, augmented by LAPD training for safety in personal and passenger security. The following points also are very important part of our safety policy:

- Promote and maintain a positive safety culture with positive recognition and reinforcement of safe behaviors.
- Ensure that all equipment, systems and services meet our safety performance standards through periodic audits and inspections.
- Establish performance metrics and measures of our safety performance against our safety performance indicators and safety performance targets.
- Continually develop and improve our safety processes through actively monitoring, measuring, and reviewing our performance against our objectives and targets.
- Conduct safety and management reviews to improve our safety performance and ensure that relevant and corrective actions are taken.
- Comply with all state and federal regulatory requirements and standards.
- Establish and maintain a safety data system, to monitor and analyze trends in hazards,

incidents and accidents;
- Monitor and evaluate the results of corrective actions with respect to hazards, incidents and accidents;
- Determine the adequacy of the training provided to the person responsible for Maintenance, Operations and other personnel who are assigned duties related to the safety management system

Any additional requirements for the Safety Management System that are proscribed under the Code of Federal Regulations will be identified and implemented based on information we do not now have. Regular updates of this plan are the tool for accomplishing this.

Safety Management Policy Communication

It's the responsibility of everyone to communicate the above policy throughout the agency. Safety management policy will be communicated from the top down, from Jay Kim and Seleta Reynolds. Safety will be regarded objectively. Areas that need improvement will be dealt with openly, without concern for egos. Work toward a mature sense of safety responsibility which means acceptance of responsibility and making improvements happen. Poor hazard reporting tools thwart active hazard reporting. For example, when employees are unable to receive feedback that their hazard reports have been received, there is little incentive for them to continue reporting.

There should be meetings and other communications from the executive team demonstrating that the Safety Plan is a mandated directive from the owner of our bus fleet and yards. All of these are now, or will be soon; federal assets.

Near Misses

Operators should be encouraged to report near misses so these can be shared in future safety classes as lessons learned. Over the months and years, there will be more and more potential hazards identified and already mitigated through pre-emptive training based on near misses.

A near miss may be caused, or partially caused by numerous factors, separately or combined. The goal of LADOT and MV together will be to constantly identify new sources of hazards all the way from bus route engineering, maintenance, operator error, and the nearly endless external hazards such as road conditions, weather, intoxicated or distracted drivers, disturbance or distraction prone passengers, intoxicated pedestrians and so forth.

Describe how the safety management policy is communicated throughout the agency. Include dates where applicable.

Our policy is based on reality and every-day behaviors, not a static paper-only policy. Safety is not a philosophy; it is an attitude and behavior.

Authorities, Accountabilities, and Responsibilities *Describe the role of the following individuals for the development and management of the transit agency's Safety Management System (SMS).*	
Accountable Executive	Jay Kim,The Accountable Executive is accountable for ensuring that the agency's SMS is effectively implemented, throughout the agency's public transportation system. The Accountable Executive is accountable for ensuring action is taken, as necessary, to address substandard performance in the agency's SMS. The Accountable Executive may delegate specific responsibilities, but the ultimate accountability for the transit agency's safety performance cannot be delegated and always rests with the AE.
Chief Safety Officer or SMS Executive	Otamez Haddock Chuck Hammerstein
Agency Leadership and Executive Management	Jay Kim to enforce safety management under direction of Seleta Reynolds.
Key Staff	Tommy Melendez, Head of maintenance. Brian Lee and Chun Leung, operations.

Safety Risk Management

Safety Risk Management Process

Describe the Safety Risk Management process, including:

- *Safety Hazard Identification: The methods or processes to identify hazards and consequences of the hazards.*
- *Safety Risk Assessment: The methods or processes to assess the safety risks associated with identified safety hazards.*
- *Safety Risk Mitigation: The methods or processes to identify mitigations or strategies necessary as a result of safety risk assessment.*

FTA is the oversight authority and calls for specific hazard identification. In addition to identification processes to be developed by MV and LADOT, we are mindful to monitor the FTA itself, along with other governing agencies, as to new hazard identification techniques which they may develop. The leading agency in our region is LA METRO and we will also learn from them concerning hazard identification. Our MPO, SCAG is another potential source of hazard identification.

Safety Risk Processes

Safety Risk Assessment assesses safety risk associated with identified safety hazards and their consequences using its safety risk assessment process. Process includes an assessment of the likelihood and severity of the consequences of hazards, including existing mitigations, and prioritizing hazards based on safety risk.

Safety risk assessment process has five steps:

• Step 1: Collecting Information;

Manager collects information on identified hazards and its potential consequence(s). For each identified hazard, someone opens a file in the Safety Risk Register module of our safety information system to provide background and support assessment. Typical information collection activities include:

Review safety information system and records to identify information relevant to the hazard and its potential consequence(s);

Interview employees and contractors that work in the area or discipline where the hazard and potential consequence(s) have been identified;

Conduct a walkthrough of the affected area or system, generating visual documentation (photographs and/or video), and taking any measurements deemed necessary;

Interviews with subject matter experts to gather potentially relevant information on the hazard and potential consequence(s);

Review any documentation associated with the hazard (records, reports, procedures, inspections, technical documents, etc.);

Contact other departments or agencies that may have association with or technical knowledge relevant to the hazard or its potential consequence(s);

Review any past reported hazards of a similar nature;

Review information provided by FTA or an oversight authority; and

Evaluate tasks and/or processes associated with the hazard and its potential consequence(s).

• Step 2: Assessing Severity; Assessing Severity;

The manager, working with a small team, if one is assigned, will assess the severity of impact of the worst credible potential consequence(s) of the hazard if it/they occurred, taking into account existing mitigations. This includes impact to people, systems, equipment, and the environment.

• Step 3: Assessing Likelihood;

The manager, working with a small team, if one is assigned, will assess the likelihood of the worst credible potential consequence(s) of the hazard taking into account existing mitigations.

• Step 4: Determining the Safety Risk Index;

5x5 RISK MATRIX

PROBABILITY					
Highly Probable	5 Moderate	10 Major	15 Major	[illegible]	[illegible]
Probable	4 Moderate	8 Moderate	12 Major	16 Major	[illegible]
Possible	3 Minor	6 Moderate	9 Moderate	12 Major	15 Major
Unlikely	2 Minor	4 Moderate	6 Moderate	8 Moderate	10 Major
Rare	1 Minor	2 Minor	3 Minor	4 Moderate	5 Moderate
	Very Low	Low	Medium	High	Very High

IMPACT

:

with a small team, if one is assigned, will combine the assessed severity and likelihood into a safety risk index. The table as seen, is an alphanumeric rating for each potential consequence to prioritize safety risk.

• Step 5: Documenting Results.

The required information, including the hazard, hazard type, identification source and date, and the hazard's consequences, including the worst credible potential consequence(s), and the existing mitigations (hard and soft) that address the worst credible potential consequence(s), assessments regarding severity and Public Transportation Agency Safety Plan Regulation (49 CFR Part 673) Version 1 (July 2020) Page 23 FTA FEDERAL TRANSIT ADMINISTRATION likelihood of the worst credible potential consequence(s), and any related or supporting documentation.

The table above includes six likelihood levels: A. Frequent B. Probable C. Occasional D. Remote E. Improbable F. Eliminated

• Low (Acceptable without Review) – We determine that existing mitigations adequately address safety risk and management review is not necessary.

• Medium (Acceptable with Existing Mitigations and Management Review) – determines that mitigations currently in place adequately address safety risk with management review.

Evaluations of existing mitigations include observation and analysis by subject matter experts and the review of any historical data related to the hazard and consequence under assessment. When necessary, evaluation of the effectiveness of mitigations may include reaching out to external transit experts and discussions with peer transit agencies facing similar concerns

. • Serious (Acceptable with Monitoring and Management Review) – DOT requires management review, as specified to determine if safety risk mitigation is ineffective, inappropriate, or not implemented as intended.

• High (Unacceptable; Management Approval required) – DOT requires action to mitigate safety risk.. We will suspend service or activities related to hazards with a high safety risk index until the safety risk has mitigated to an acceptable level. As specified management approval is required prior to resuming suspended activities.

Required management reviews and approvals will also be documented in the system. Policies and Procedures The Safety Department maintains the policies, procedures, checklists, and forms that support safety risk assessment activities. The manager records the results of the safety risk assessment process in the Safety Risk Register. Completed safety risk assessments and supporting attachments, documented in the Safety Risk Register module of the safety information system.

MV must submit and carry out a corrective action plan for any deficiency. Safety Risk Mitigation Based on the results of the safety risk assessment, the safety risk associated with the worst credible potential consequences of identified hazards will be resolved through the development and implementation of mitigations.

Mitigations may:

• Eliminate the safety risk of a hazard;

• Reduce the likelihood of the potential consequences of a hazard; and/or

• Reduce the severity of the potential consequences of a hazard. The goal of the safety risk mitigation process is to eliminate the hazard if possible. When a hazard cannot be eliminated, We will reduce the associated risk to the lowest acceptable level within the constraints of cost, schedule, and performance by applying the design order of precedence.

The appropriate department head, or manager of the impacted department will approve the safety risk mitigation. Depending on the nature of the safety risk or mitigation, additional approvals may be required from Agency Leadership and Executive Management and/or the Accountable Executive. Public Transportation Agency Safety Plan Regulation (49 CFR Part 673) Version 1 (July 2020) Page 24 FTA FEDERAL TRANSIT ADMINISTRATION Safety risk mitigations must include milestones, schedule, budget and the part(ies) responsible for implementation.

Chef Safety Officer, monitors the contractor's safety risk mitigation process through quarterly on-site records reviews and mitigation documentation submitted by the contractor.

CONDITIONS INPUTS RANGING FROM DRIVER FATIGUE TO MECHANICAL MALFUNCTIONS, TRAFFIC, ROAD SIGNAGE PAINTING, ETC.

The more hazards identified, the more accidents and consequences can be prevented. Certain risks are always present and leave no choice but to be accepted. This is the risk from other vehicles' actions and other things beyond reasonable control. Most risks, however, can be mitigated. Risks are hazards to some degree, and they must be accepted in some cases, but in most mitigation can reduce the risk to as near zero as possible

The risk-management process combines hazard identification, risk assessment, and mitigation of the risk. Safety hazard identification includes specifying sources of information. Our information currently comes from Transtrack software which is populated with incidents ranging from slips and falls, mechanical issues, bus stop issues, scheduling; in short, all factors that may cause or influence negative outcomes.

As elaborated upon below in Safety Assurance we are planning a number of new sources of hazard identification, including those required such as an employee hazard reporting system, as well as new systems not formalized or implemented yet, such as a public app for reporting real time and static safety and service concerns.

Hazard identification is a nexus to our Transit Asset Management system (TAM) for identifying potential mechanical issues ranging from brake and tire condition to fire suppression, suspension integrity, alignment and steering and so forth.

As specified under the policy section, proactive input from a wide variety of sources, both electronic (like cameras), drivers, passengers, pedestrians and observers may notice something

that is not quite right, ranging from a poorly timed traffic light, to a physical problem with the street.

Still another source of data being developed is MobilEye cameras and sensors which provide blind-spot notification, collision avoidance systems, sudden braking, lane deviation, and so forth. When an event on a bus reaches a threshold, the Smart Drive system records video footage. There are four types of events that are triggered and recorded by the Safety Program: Erratic, Shock, Speeding, and Manual. Erratic Events are characterized as Moving Events. They are triggered by sustained forces from multiple directions (front/back, left/right, and up/down) over relatively long periods of time (typically between 0.25 and 1.5 seconds) as measured by an accelerometer. Erratic Events capture risky driving maneuvers such as hard braking, acceleration, turning, swerving, speed bumps, dips in the road, etc. Shock Events are also characterized as Moving Events. They are triggered by sudden changes in force in any direction as measured by the system. Shock Events have a higher likelihood of recording Collisions, but they can also be triggered by other actions that involve sudden changes in forces such as when a vehicle hits a pothole or a bump at high speed. Speeding Events are characterized as Moving Events. They are triggered when the vehicle speed exceeds a specified threshold.

Under this section are the classic risk assessment and mitigation matrices which attempt to assign ranking of hazards through severity juxtaposed to likelihood. This may range, for example, from 1/A to 4/E. This is a useful tool in some scenarios in which a hazard may not be properly recognized unless it is forced through an objective formula. For example, a marginal hazard such as lack of a red curb at a bus stop becomes officially unacceptable when its frequency as a marginal safety hazard makes multiple events likely. This hazard thereby becomes more important than a catastrophic hazard (such as a bombing) which is determined as improbable. (This statement is an example only).

All staff evaluates, and devises means to eliminate, mitigate, or accept hazards. Not all hazards can be eliminated given the resources at hand. Safety Risk Management is to mitigate hazards to a level as low as reasonably practicable – to a level where the cost involved in reducing the risk further would be grossly disproportionate to the benefit gained. The processes outlined in this section describe LADOT's approach for identifying hazards, investigating them, evaluating them, and finally mitigating them.

Once a mitigation strategy has been implemented it must be measured as to effectiveness. Assuming proper implementation, a pre-mitigation and post-mitigation trend analysis needs to be conducted to determine if it worked, and if not, how to approach the same issue again. It's MV's job to put the information into a tracking system such as Transtrack, and LADOT managers must make sure things get done.

The table-matrix of severity vs. likelihood is the simple core of risk assessment. The potential risks actually exist in a web of reality more like the prior table, but for its basic purpose of assigning risk level based on severity vs. frequency. Actions taken based on the table are explained in this section and subsequent sections.

Definition of Safety

"Safety is the state in which the risk of harm to persons or property is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and risk management"

Priority #1 Hazard will occur frequently or often and could result in fatality

Priority #2 Hazard will occur infrequently and could result in a fatality; or frequently or often and could result in a serious disabling injury

Priority #3 Hazard will occur infrequently with a serious disabling injury; or any probability with a minor injury or no injury. Frequently = once per week for 4-5 consecutive weeks at a specific location on a specific line Often = once per month for 3-4 consecutive months at a specific location on a specific line Infrequently = once every 6 months.

A hazard may rise or fall in priority both as to its probability juxtaposed to its severity. A non-likely severe event may attain equal priority with a likely, but less severe event. While in every-day circumstances, all hazards are mitigated, however, the chart will assist in determining where to allocate resources to eliminate or mitigate a wide range of unlikely severe events as well as every-day less severe events which still may lead to injury.

This process involves identifying, reporting, evaluating, and mitigating work-place hazards and near miss incidents through various means. Once identified and reported, the hazard is evaluated, corrected or mitigated by implementing design changes, installing safety devices, installing warning devices/signage, or changing work practices/work procedures to provide a level of safety that is practical with the available resources of the agency.

Within the context of non-rail, local neighborhood circulators such as LADOT's DASH, less ordinary hazards are more likely than extraordinary ones to receive our most urgent responses. In summary every potential risk should be eliminated or mitigated according to its ranking on the above chart.

Hazards may be further identified by injury or illness investigations, accident investigations, an observed workplace or road hazard, as a result routine and non-routine inspections, near misses, audits, and public complaints.

For serious hazards that are immediately dangerous to life or health employees of LADOT or its contractors should take immediate action to mitigate the hazard or remove the bus, and its passengers-pedestrians from the threat. If a threat cannot be mitigated or abated, the area or circumstance should be avoided, evacuated or quarantined. Such a circumstance can be as impromptu as a malfunctioning traffic signal, incorrect signage, criminal activity, flood, fire, civil unrest, or result from electrical or water anomalies. In the less likely category, but equally reacted to are events such as a local act of crime or terror, to a widespread or coordinated event including bus hijacking, bombing, deadly gas attack, biohazards, and many, many more possible events and circumstances. Such an event may be overtly obvious such as gunfire, or unobserved or reported, such as a chemical attack or accidental chemical or substance accident. Recommendations may include modification of equipment or facilities design, changes to maintenance schedules or practices, revision of operating rules/procedures, employee training, relocation of bus stop locations, modifications to rail stations, installation of traffic control devices or traffic signs, and markings, etc. LADOT has the means to correct signage, road markings, signal issues and so forth. In some cases outside agencies may be involved.

Consequences of Hazards

For every hazard there is a consequence. To mitigate a hazard it is necessary to identify each element of the hazard. A misplaced iron cover on a street is an example of a hazard. The *consequence* of that hazard may be a bus skidding or blowing a tire. A mitigation of that hazard involves replacing the cover. It may also be necessary to inspect the buses which may have run over this cover repeatedly to prevent a secondary hazard. Also, of course, how the bus reacts

the first time it hits the protruding cover depends on the soundness of the suspension system, tire condition, and driver reaction. A consequence of the hazard can compound or obscure the hazard.

Mitigation

For every risk we identify we devise a mitigation strategy that constantly improves safety, one risk factor at a time. The risk of harm to riders and property should be maintained at or below an acceptable level through hazard identification and risk management. Then safety must be assured and verified through active assessment and judgement of a mitigation measure.

A risk can be a mechanical issue, a traffic engineering problem, construction, poor bus stop location, lack of red curbs, etc., or a driver not sufficiently trained for the level of risk on a given route. An incident in real life probably involves more than one issue. For example, a bus runs up over a curb due to a tire rupture. There may have been an alignment issue with the bus, a worn tire, a missed pre-trip inspection, and/or a fatigued and unprepared operator.

When a hazard is identified such as among the many examples above, a direct action will be taken to mitigate the hazard. This may include re-training of a driver, installing a red curb at a bus stop, properly mitigating the effect of construction on the route including re-routing or temporarily skipping a stop.

Risk mitigation can take place through a wide range of methods from procurement of safe buses and collision avoidance systems, to improved maintenance procedures, proper driver scheduling to avoid fatigue, working conditions, road hazards, de-escalation of conflicts with riders and so forth. These hazards may develop and change over time based on political or social events, weather, new road hazard developing from lack of maintenance, poor signage, poor management of construction activity, and physical problems with the road.

Risk mitigation can take place through a wide range of methods from procurement of safe buses and collision avoidance systems, to improved maintenance procedures, proper driver scheduling to avoid fatigue, working conditions, road hazards, de-escalation of conflicts with riders and so forth. These hazards may develop and change over time based on political or social events, weather, new road hazard developing from lack of maintenance, poor signage, poor management of construction activity, and physical problems with the road.

The FTA Identifies Hazards and Consequences – Strictly Defined

Federal Transit Administration (FTA) defines a hazard in 49 C.F.R. Part 673.5 as "any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment." The FTA is the defining authority to systematize and thoroughly address the processing of hazards in transit.

There are many sources within our transit agency to support hazard identification, including the very important reporting of safety concerns by employees. A hazard holds potential that, when triggered, results in a consequence(s) that may cause harm or damage. The severity of the potential consequence(s) may range from negligible to catastrophic, depending on the nature of the hazard and the particular operational conditions. What is a Consequence? If a hazard lets us know *"what's wrong,"* then a consequence tells us *"what could happen."* A consequence may result when the hazard's potential is triggered or acted upon. Within the Safety Risk Management process we must analyze an identified hazard to understand its potential consequences. Below are examples and potential scenarios.

LADOT assesses how often a potential consequence could occur (likelihood) and its harm or damage (severity). This assessment results in an understanding of the safety risk associated with the hazard and helps management decide if action is needed to address the safety risk.

Why Distinguish Hazards from Consequences?

When you are first alerted to a safety concern, it is important to correctly identify what exactly is contributing to the unsafe condition, i.e., the hazard. If we mistake a consequence for the hazard, we might not fully understand the actual safety concern and its true potential (safety risk) and the condition could worsen. In addition, if we mistake a consequence for the hazard, we also might allocate resources to address only the single consequence and miss other consequences that could cause equal or greater harm. Think back to the airline example. The ignition of the shift of the unsecured canisters may have triggered the airplanes sudden steering input, tipping the cannisters, once tipped the fact that safety tops were not secured comes into play. What's the hazard and what's the consequence? The hazard was the lack of securing the canisters in the first place. The other things are consequences. Although in practice different points of view may be taken.

The Heart of the Issue

When we consider safety risk, we want to allocate resources to address what could happen. We need to have a grasp of what the triggering event could be. Events are things that have already happened. Safety Risk Management focuses on the future. To effectively mitigate the safety risk associated with a hazard, we will reduce the likelihood or severity of the potential consequences associated with the consequence of the hazard.

We organize identified hazards in a classification system to support LADOT's data management and hazard prioritization activities. Hazard information can come from many sources including agency information gathering and analysis, active reporting from employees and the public, continuous monitoring of the information systems and data used in operations and maintenance, and routine observations of transit service.

You can also identify hazards through the use of tools, such as hazard lists, brainstorming sessions, guidance from FTA and SSOAs, and lessons learned from peers and industry associations. There is no right or wrong approach to categorizing hazards. FTA recommends, however, that transit agencies consider using the above (more in Appendix A) classification matrix when establishing a classification system.

Hypothetical Example (not actual)

If we do not regularly monitor operations we aren't going to register or observe potential incidents at bus stops. In this case its bus stops located on the near side of certain intersections in the agency's network (category: technical hazard; subcategory: operational hazard). Also, as bus operators approach these intersections, the placement of the rearview mirror forces operators to lean forward to achieve a complete view perspective of the intersection (category: technical hazard; subcategory: design hazard). Some operators are unable to lean far enough forward to have an unobstructed view. Also, at this hypothetical agency, the brakes of buses frequently collect moisture due to the particular brake design, reducing brake effectiveness (category: technical hazard; subcategory: maintenance hazard).

This situation is aggravated when it rains (category: environmental hazard; subcategory: weather hazard) and by the slope prevailing in most streets due to the geography of the city (category: environmental hazard; subcategory: natural hazard). Under these circumstances, the driver hit a pedestrian.

This example is provided for illustration only. We must identify hazards relevant to our transit system. FTA defines hazard as "any real or potential condition that can cause… [harm and damage]." A person is not a hazard because people are not conditions. People commit

operational errors and may be engaged in activities with potential consequences. But people should not be assessed as you would assess a hazard. The operational conditions that led to the error should be assessed.

In the example above, it may have concluded that the potential consequence (striking a pedestrian in a crosswalk) was based solely on bus operators not leaning far enough forward for an unobstructed view of the intersection. It's easy to have missed the underlying conditions that led to the error. In classifying hazards, we need to look beyond employees to the conditions within their operational context in order to identify the hazard. By identifying and addressing real or potential conditions, we can improve the context where service delivery operations take place, since even the best thought-out and well-planned systems cannot account in advance for all the conditions that could affect human behavior.

Things such as planning, financing, budgeting, communication, supervision, training, and so forth can lead to shortcomings with our contractor. The shortcomings in these processes may impact the safety performance. Organizational hazards do not usually generate direct consequences, rather they influence the conditions under which transit services are delivered.

There usually is some intermediate operational condition(s) – that must be identified – in between the organizational hazard and the potential consequence. For example, deficiencies in maintenance training for mechanics (organizational hazard) lead to the dispatch of buses with ineffective brakes (technical hazard, the intermediate condition). This intermediate condition is what may lead to the potential consequences, for example, damage to vehicles from a collision between a bus and a car.

Unlike technical and environmental hazards, which are normally resolved at the supervisor level, organizational hazards require executive management resources and authorities to resolve them. In the example above, addressing deficiencies in maintenance training for mechanics falls under the executive management level, and, once it is fixed, resolving the condition of ineffective brakes falls under the supervisory level.

For hypothetical, not real, example, in response to a budget crisis, LADOT reduces resources for training programs. Due to this reduction, training for bus operators on specific changes to operational conditions becomes outdated (organizational hazard). The city has introduced changes to bicycle and pedestrian crossing treatments (changed operational condition – technical hazard). Bus operators' procedures are not amended to reflect the change. The change in crossing treatment may lead to consequences, for example, collision between buses and bicycles or buses with pedestrians, that may result in damage and injuries. In this example, without breaking down the organizational hazard (outdated training) to understand its influence on operating conditions (change in crossing treatment), the potential consequences are hard to define and not obvious to mitigate. Differently put, the link between outdated training and collisions is neither obvious nor intuitive.

PTASP IMPLEMENTATION: HAZARD CLASSIFICATION

Subcategories of Organizational Hazards include Resourcing Hazards, Procedural Hazards, Training Hazards, and Supervisory Hazards.

Examples of Resource Hazards

• Inadequate parts and materials available to maintain equipment

• Lack of qualified engineers to support maintenance functions on streets. Examples of Procedural Hazards

• Lack of procedures and manuals for conducting maintenance activities

• Incorrect, incomplete, or outdated procedures or manuals for conducting operations and maintenance activities

• Confusing or overly complicated procedures and manuals

• Overly cumbersome process for updating manuals and procedures

• Lack of or ineffective procedures to address fatigue in employee work scheduling

• Lack of or ineffective procedures to ensure employee fitness for duty and medical qualification
• Lack of or ineffective policies and procedures for managing substance abuse, over the counter medications, and prescription medications

• Lack of or ineffective procedures for reporting hazards and safety concerns Examples of Training Hazards

• Lack of or incomplete training on current procedures and requirements

• Outdated training that no longer reflects current operating practices

• Inconsistent, incorrect, or ineffective training

• Unavailable training on a new technology or system implemented by the transit agency

• Lack of internal and external communication to support training delivery, including language barriers

• Lack of skill or qualification in training delivery

Examples of Supervisory Hazards

• Lack of employee performance monitoring

• Inaccurate or confusing work instructions or verbal directions

• Lack of or poor management and labor relations

• Lack of employee compliance with operating and maintenance rules

• Lack of or ineffective audit and work observation procedures

Safety Assurance, Monitoring and Measuring

In plain language safety assurance means fixing the problems we identify. In other words, assuring safety by verifying that risk controls are effective. Then we see if what we are doing is working both in the short- and long-term. If not, we come up with new risk-control strategies, as well as identify any new hazards. Use of risk-management matrices indicating likelihood vs. severity of event and have a plan to ward off such an event. Develop a true means to remedy hazardous situations promptly and not be hamstrung by City red tape. Have a means for quick hazard reporting. If we identify a problem, we must correct it promptly, or there is no value in identifying the hazard.

Describe activities to monitor operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended.

Our job is to continuously observe and record safety performance, as well as evaluate safety management processes and practices. We will establish clearly stated performance targets as well as indicators (SPT, and SPIs).

We should demonstrate that our organizational arrangements and methods for safety achievement are properly applied to achieve objectives. Measure and assign risk levels, monitor effectiveness of solutions. Most of the following is already done. Some will be added or eliminated in the future. *Examples:*

Measure the number of slip and fall cases, then reduce the number of such events by:

- Determination if slips and falls are caused by intoxication, wet floor, worn floor, sudden stops, starts, swerving, or a combination of these factors.
- Monitor side-swipes when entering and leaving bus stops, and increase red-curb bus zones where needed.
- Monitor cases where fare-evading passengers are injured entering through the back door
- Count near misses of pedestrians during left turns. Mitigate through training or elimination of left turn
- Count disturbances by mentally impaired passengers

- Continue counting assaults on drivers, mitigate through training in de-escalation up to installing protective enclosures when warranted.
- Measure and conduct risk assessment on accidental or purposeful discharge of chemicals or gases
- Assess assaults on passengers at or near bus stops. Mitigate through managing homeless encampments through social services, law enforcement, mental healthcare or a combination of all of these.
- Count near misses of pedestrians around bus stops due to congestion, illegal parking and other factors causing difficult boarding and alighting.

There are dozens of similar and ever-changing examples. We must identify problems continuously, fix them, then count the number of incidents. If we are doing it right, bad things will happen less. We will monitor our operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended. It's necessary to review pre-mitigation and post-mitigation trend data captured in various ways to determine the effectiveness of the safety interventions.

We will also develop specific contingencies for common dangerous situations that may not have a set policy at this time. For example a sleeping passenger remaining on a bus during layover is a common problem. Generally it is a matter for the police and not the driver. Any situation setting up a conflict should be avoided from fare evasion, to asking a patron to leave a bus.

Setting standards such as calling dispatch and/or police immediately will continue, but also new methodologies and technologies will be considered such as live visual feed of the event, sharing of radio frequencies with law enforcement for certain conditions, especially if the police are working the line already. Currently our bus operators can bypass the cumbersome 911-call system for prompt service. Other methods for reaching help in a hurry can be explored with ever-changing possibilities both technological and other.

Describe activities to conduct investigations of safety events, including the identification of causal factors.

We follow MV's investigation procedures, but should be sure they cross check causal factors and provide a thorough analysis of more than one factor. In short, the investigation should be dynamic as opposed to static. For example, one collision could have driver error, driver fatigue, a maintenance issue, a bus stop issue, any or all of which may have contributed to a single event. It may be tempting for a contractor to simply say, non-preventable.

We must review the investigation of injuries/incidents and near misses, and make recommendations to mitigate them. Operations-wide Safety Programs to drive improved

performance and to identify and resolve issues that prevent or hinder improved safety success. The proposed modification must be evaluated for its potential to create additional hazards or to reduce the effectiveness of existing hazard controls. First do no harm.

Describe activities to monitor information reported through internal safety reporting programs.

Monitoring information reported through reporting programs will be done by the chief safety officer and many others. We have innovative concepts such as a public smart-phone application to report concerns of a long-standing, or recent development. We will continue to use Transtrack to monitor incidents, collisions, assaults and other events as well as to come up with our statistical trend analysis thereby establishing baselines of events with methodology to reduce or eliminate that type of safety/security event. The following will be carried out by our contractor, MV Transportation, Inc.

The following is primarily carried out by MV employees, however, LADOT will also train its own employees along similar lines. This would include the wherewithal to know what to smell, look or listen for when out in the field, visiting yards, or riding the buses. This could include CNG leaks, waste oil spillage, electrical panel observation, camera functionality and placement, perimeter damage, and conditions outside the perimeter such as imminent fire hazards, homeless encampments, and much more.

MV's front line employees are our best source of information for identifying hazards. Nobody knows more about the actual safety performance of the transit system than the employees who deliver the service.

The Employee Safety Reporting Program (ESRP) is intended to help the Accountable Executive and other senior managers get important safety information from across the transit agency. It can be an agency's most important source of safety data.
There are two types of safety reporting programs: mandatory and voluntary.

- **Mandatory**: Employees must report hazards that are compliance-based and address regulatory issues. Employees are required to immediately report every incident and accident. An employee's failure to report or provide false information of an unsafe hazard or act could result in disciplinary action.

- **Voluntary**: Employees are strongly encouraged to report hazards and can report anonymously. Every employee is empowered to report any unsafe hazard / risk to their supervisor or senior management without fear of retribution or penalty.

Employees will have the option to report anonymously to maintain confidentiality. The ESRP is non-punitive and employees will not be disciplined for the act of reporting the Hazard or Near Miss. However, employees must report hazards that are compliance-based and address regulatory issues. Record falsification, Drug & Alcohol violations, gross negligent behavior, and failure to report accidents/incidents and serious safety hazards are examples of employee behaviors that may result in disciplinary action.

Forms of reporting can include submitting a completed SMS Hazard/Risk Report Form (found in the Appendix) or utilizing a centrally located Safety Suggestion Box at the division location. The transit agency may also have an additional form of Employee Safety Reporting.

The Hazard/Risk Report Form shall be completed immediately, so proactive measures can be taken as soon as possible. Depending on the perceived level of risk and severity, the report shall be submitted immediately or by the end of their shift.

Input by employees into the ESRP can include safety concern reporting, operational system description, hazard identification, safety deficiencies, risk assessments, potential consequences of hazards, or recommended safety risk mitigations.
Examples of reports may include the following;

- Safety hazards in the operating environment (for example, county-city road conditions)
- Policies and procedures that aren't working as intended (for example, insufficient time to complete pre-trip inspections)
- Events that senior managers might not otherwise know about (for example, near misses)
- Information about why a safety event occurred (for example, radio communication challenges contributed to an incident)

The information we receive through this source will help us resolve the reported hazard and notify the supervisor or senior management of changes that may need to be made to mitigate safety hazards in the future.

The Safety Department will lead the effort on collection, analysis, resolution, and monitoring of hazards and feedback entered through the ESRP. The Safety Department will take the

lead on the Safety Risk Management process, with inputs from subject-matter experts in operations and maintenance.

Information collected through our ESRP will feed into our hazard identification and analysis process. Please reference that section of the plan for further information on mitigation, resolution, and communication.

In addition, it will be MV's responsibility to go full circle and inform the reporting employee what actions were taken on the basis of their reporting. Prompt, thoughtful feedback will encourage employees to keep reporting things.

Also data should be maintained for later trend analysis.

Some hazards are easy to identify and report. Other hazards may be more complex and will require investigation. Confidentiality should be mentioned more than once, including whistleblower protections. Hotlines, paper forms, safety meetings, SharePoint side, phone apps, or third part information collection service are all ideas that would work.

A crowd-sourced Safety App is a recommendation to allow customers to rate the transit service while reporting long-term, or one-time safety and security events. This would take into account conditions on the bus such as overcrowding, unsafe driving, traffic blockage or hazards. This would be similar to WAZE which allows drivers to inform other drivers about the current driving conditions. Riders could inform other passengers and police of any potential safety and security hazards.

Management of Change

Here we assess how changes will work. One possibility is that the solution may introduce new hazards or impact our current safety performance. For example, rear-view cameras, when first introduced for backing up, increased side collisions while backing up. As in medical practice, the first rule is not to make it worse.

External changes may stem from service expansion, new bus stops, new buses, influx of new drivers, intoxicated passengers, homelessness, or many other unforeseen fresh developments and conditions.

Continuous Improvement

Describe the process for assessing safety performance. Describe the process for developing and carrying out plans to address identified safety deficiencies.

As with all large service providers, we will have a process in place for assessing safety performance over time. When deficiencies are found, there must be a plan to fix it and carry out the fix, and ***be sure it stays fixed well into the future.*** This is a dynamic process that monitors how an old fix may need to adapt to further changes in the future. Things obviously change over time. Continuous improvement is about adaptability and flexibility over the months, years and decades – which will see radical changes from road design to autonomous vehicles.

At least annually there will be a new assessment of every identified hazard, which in turn will be incorporated into the annual review of the Safety Plan itself. You can think of this as a tree trunk that continually produces new branches – which will in turn, produce new branches.

The chief safety officer will be responsible for reporting deficiencies and elevating them to the Accountable Executive for action. Year after year will see changes in both technology of buses as well as changes in road design for autonomous vehicles and so forth. Today's hazards will not be tomorrow's hazards.

Safety Promotion

This is basically the training program done by MV Transportation. It involves safety communications as well as competencies and training. LADOT Transit Division oversees a contractor, MV Transportation to operate and maintain the City's buses. Each garage operated by MV has an LADOT project manager, as well as heavy-duty equipment mechanics who inspect and oversee MV's service. We also have a chief safety officer.

MV Transit is responsible for training new Bus Operators in defensive driving, as well as all other training as to safe vehicle operation, pre-trip and pre-pull out inspections, emergency procedures, and injury and illness prevention. MV also performs re-training following traffic accidents, occupational injuries, and as otherwise warranted. Training should incorporate lessons learned from near misses as well as in proactive ways, and discussion of safety issues brought to management's attention by employee reporting systems developed for this plan.

Safety communication responsibility takes place both within MV and LADOT. Operator training and communication falls largely to MV, and their procedures are stated below under "Additional Information." LADOT however, must remain actively involved and provide training by the LAPD when deemed necessary, and assure that every form of communication and outreach is performed in support of the goal of communicating, learning, changing behavior and achieving the reduction in safety events that we target.

Safety Promotion provides visibility of executive management's commitment to safety, and fosters improved safety performance by increasing safety awareness through safety communication and training. Through communication of lessons learned and broader safety information, employees are made aware of safety priorities and safety concerns at both the organizational level and as they relate to their own duties and responsibilities.

The appropriate training for all staff, regardless of their level in the agency, provides visibility for, and knowledge of, the SMS. It ensures employees receive the training they need to do their job safely, and gives them shared ownership of the transit agency's safety mission. This training commitment demonstrates management's commitment to establishing an effective SMS.

Additional Information From FTA and MV Transit

FTA
SAFETY PROMOTION SUB-COMPONENTS

1. *Safety Communication* – A two-way feedback loop between frontline employees and management about safety information is crucial in establishing a positive safety culture. Effective safety communication makes personnel aware of safety priorities and initiatives and ensures that feedback is captured and acted upon as appropriate. Safety-related information must be actively and routinely communicated, and must focus on raising awareness of hazards and potential safety risks. Regular discussion of safety concerns promotes an environment that encourages employees to report concerns and demonstrates management commitment to both the employees and the agency's safety performance objectives.

2. *Competencies and Training* – Training of all employees with respect to their role and responsibilities as they relate to agency safety performance is perhaps the most critical driver for successful SMS implementation. It also shapes employee perception of executive management's commitment to safety. Achieving appropriate levels of competency for each staff level enables the consistent application of their skills to help the transit agency achieve its safety performance objectives.

   SMS promotes a strong culture of safety
   - Safety Promotion encourages and teaches safety through effective communication and training.
   - Safety Promotion ensures employees at all levels get the training they need to do their job safely.

   At the frontline employee level, safety management training should provide for the development of *safety reporting competencies*, i.e. employees should receive formal training on the expected contents of employee safety reporting (what to report; what not to report) and the procedures established for reporting.

   At the safety management level, formal training should develop safety data management competencies, i.e. how to analyze safety *data,* extract *information* from the safety data, and turn safety information into safety *intelligence* for senior management decision-making for the allocation of safety management resources.

SMS Implementation and Maturity

SMS implementation occurs over time and requires a shift in the management and perception of safety by individuals and the organization as a whole.

A transit agency builds SMS maturity through a series of steps that lead to confidence that safety risk is being identified, evaluated, and mitigated to an extent that is consistent with its safety objectives and safety performance targets. An agency's SMS is mature when agency employees, from Accountable Executive to frontline operators, can unequivocally answer these five questions:

(1) What are our most serious safety concerns?
(2) How do we know this?
(3) What are we doing about it?
(4) Is what we are doing working?
(5) How do we know what we are doing is working?

The FTA hopes that this SMS Framework, and subsequent training, guidance, and assistance, will help expedite SMS maturity within the industry.

While every transit agency is unique, the common goal from the FTA Board of Directors to the Accountable Executive, middle management, supervisors, and frontline employees is to ensure that passengers reach their destination safely and employees return home each day.

FTA's SMS Implementation Phases

The Three Implementation Phases of SMS

- Phase 1 – Planning, Organization and Policy Development
- Phase 2 – Safety Risk Management
- Phase 3 – Safety Assurance

The FTA proposes three phases for SMS implementation. Each implementation phase is associated with a component of the FTA SMS Framework. There is no specific phase associated with Safety Promotion because safety management training and safety communication are ongoing activities that intertwine in all implementation phases and the life cycle of SMS.

PHASE 1 – PLANNING, ORGANIZATION AND POLICY DEVELOPMENT

The objectives of Phase 1 are to (a) generate a blueprint of how to meet and integrate SMS requirements into a transit agency's service delivery operations, (b) create an accountability framework for the development of SMS implementation activities, and (c) develop safety policy documents.

The SMS gap analysis is central to Phase 1. A gap analysis is an assessment of where the transit agency is today with respect to implementing SMS, as compared to a fully mature SMS. From the SMS gap analysis, a transit agency can determine the status of its safety management processes, including the organizational structures and resources necessary to support them. From this baseline, a transit agency can plan to develop or strengthen existing safety management processes.

The output of Phase 1 is the SMS implementation plan and completion of safety policy development.

Phase 1 Completion

At the completion of Phase 1, a transit agency should have finished the following tasks in a manner that meets the expectations set forth in relevant requirements and guidance material:

- Appoint the person and/or assemble the team responsible for the development of the SMS implementation plan;
- Conduct an SMS implementation gap analysis by reference to the components and subcomponents of the FTA SMS Framework;
- Develop an SMS implementation plan that describes the development of organizational structures and deployment of resources that are required for managing safety under SMS. The SMS implementation plan must detail the tasks, the task owners, and due dates;
- As part of the SMS implementation plan:
  - Identify the Accountable Executive and the safety management accountabilities of managers;
  - Develop the Safety Management Policy Statement draft;
  - Identify the departments involved with the integration of emergency plans, procedures, and/or protocols that direct both internal emergency response to transit related events and external emergency response with local emergency services for community-wide emergency activities;
  - Develop the blueprint of essential activities and tools of the Safety Risk Management process;
  - Develop the blueprint of essential activities and tools of the Safety Assurance process;

- Identify safety management training needs based on audience groups; and
- Develop the infrastructure for safety management communication.

PHASE 2 – SAFETY RISK MANAGEMENT

The objectives of Phase 2 are to (a) establish and implement Safety Risk Management activities and tools so a transit agency can identify and analyze hazards and evaluate safety risks, and (b) correct potential shortcomings, from an SMS viewpoint, in activities and tools that an agency already has in place. Organizationally, this is accomplished when safety risk management responsibility moves beyond just the safety department and into each operational division of the agency.

Most transit agencies have Safety Risk Management activities, though at different levels of implementation maturity and with different degrees of effectiveness. These activities and tools may include information analysis from accident reports, incident investigations, and employee reports.

Phase 2 strives to strengthen existing activities and tools and to develop those that do not yet exist. Toward the end of Phase 2, a transit agency will be ready to perform integrated safety analyses based on information obtained through different methods of safety data collection.

Phase 2 Completion

At the completion of Phase 2, a transit agency should have finished the following tasks in a manner that meets the expectations set forth in relevant requirements and guidance material:

- Hazard identification and analysis
  - Establish criteria and guidance for the activities and tools for hazard identification and analysis; and
  - Establish an employee safety reporting program.
    - Clearly identify the non-punitive aspects of the employee safety reporting program.
    - Clearly identify behaviors that are exempt from discipline.
- Safety risk evaluation and mitigation
  - Develop and adopt safety risk matrices for probability and severity, and evaluate safety risks associated with service delivery operations; and
  - Establish criteria for the elevation of safety risks to executive management, as necessary.
- Develop hazard identification, analysis, safety risk evaluation, and mitigation documentation;

- Develop and deliver training for hazard identification, analysis, safety risk evaluation, and mitigation to relevant personnel, and include the training material in relevant transit agency documentation;
- Communicate the start of the employee safety reporting program; and
- Communicate the completion of the tasks above to relevant personnel throughout a transit agency.

PHASE 3 – SAFETY ASSURANCE
The objectives of Phase 3 are to (a) implement essential Safety Assurance activities and tools that allow a transit agency to monitor safety performance during service delivery operations, (b) manage operational change, and (c) provide for continuous improvement of the SMS.

Phase 3 strives to strengthen existing Safety Assurance activities and to develop those that do not yet exist. At the end of Phase 3, a transit agency will be ready to monitor safety risk controls and engage in continuous corrective action to maintain their effectiveness over time and under changing operational demands.

Phase 3 Completion

At the completion of Phase 3, a transit agency should have finished the following tasks in a manner that meets the expectations set forth in relevant requirements and guidance material:

- Safety performance monitoring and measurement
  - Develop safety performance monitoring and measurement activities; and
  - Establish safety performance indicators and safety performance targets.
- Management of change
  - Define trigger thresholds for engaging in change management activities (i.e. hazard identification, analysis, and safety risk evaluation); and
  - Ensure no service delivery operations will be initiated in the changed environment until an initial evaluation has been conducted.
- Continuous improvement
  - Develop criteria for SMS continuous improvement;
  - Establish SMS assessments; and
  - Define internal SMS assessment activities.
  - Identify safety assurance and oversight activities carried out by external agencies.
- Document all safety performance and monitoring, management of change, and continuous improvement activities;

- Develop and deliver training on safety performance and monitoring, management of change and continuous improvement, and include the training material in relevant documentation; and
- Communicate the completion of all the above tasks to relevant personnel.

MV

Safety of LADOT's transit bus service is a partnership between MV Transportation, LADOT and LAPD. LADOT's safety officer works in partnership with an LAPD sergeant, and MV's head safety manager. In addition MV has a safety manager at each garage location with whom we communicate nearly daily. The following is from MV's safety plan.

It is the policy of MV Transportation that all employees will undergo new hire training based upon type of service and experience level. Mastery is verified through evaluations prior to being released to revenue service.

Job-specific training programs have been developed to enhance safety skills necessary for safe, secure, and reliable customer service. This includes training for operators, trainers, supervisors, maintenance staff, operations, and management personnel.

MV Transportation maintains a continuous safety communication campaign through the form of safety meetings (Safety Policy S-27). Every month, a fleet safety and injury prevention topic will be reviewed to refresh the fundamentals and key learning points. Annual refresher training on key areas will also be conducted along with periodic promotion of prevention activities.

Maintenance monthly training will focus on OSHA compliance for shop safety. The training complies with current state and federal standards and covers potential safety and health hazards as well as safe work practices and procedures to eliminate or minimize hazards.

Information concerning safety hazards or issues is provided to employees through new hire orientation, location safety committee meeting minutes, company-wide or departmental meetings, Safety Team briefings, monthly safety meetings, bulletin board postings, memos, or other written communications.

All MV operators will receive refresher or remedial training, as necessary, throughout their employment with the Company (Safety Policy S-12). This can include, but is not limited to, defensive driving techniques, ADA and Wheelchair Securement activities, Fatigue Management, Pedestrian and Bicyclist awareness, as well as hands-on training. This training provides a procedure for evaluation job skills and determining subsequent retraining needs or employees

who are returning to work after an extended leave, employees who have been involved in an accident and refresher skill training.

Training, retraining, proficiency checks, and safety meeting attendance will be recorded and documented.

Training records are kept by the department supervisors and managers and will include:

- Date of training
- Employee names
- Copies of training materials
- Training subject
- Location of training
- Name of trainer
- Signature of trainer and trainee

A training audit and training needs assessment will be conducted at least bi-annually, or as a result of activities that come out of the SRM process.

Safety Culture

Our Vision is to deliver the *Best Customer Experience* with industry-leading Safety, Reliability, and Innovation. Our fundamental safety belief is that Safety is a core business value and there is nothing more important than promoting and maintaining a safe operation.

Our Safety Culture Guide outlines the importance of implementing initiatives at the local level to promote a positive safety culture.

To foster a positive safety culture, supervisors and management should make every effort to demonstrate their commitment to safety, offering the highest level of respect and dignity and a genuine concern for the welfare of their workers. Supervisors and management will exhibit the behaviors they want to see as part of their location's safety culture.

Elements of our Safety Culture Guide include:
Our Policy and Commitment to Safety statement will be distributed to all managers to be reviewed with all employees during initial onboarding. This will be reviewed at least annually to continuously promote a safe work environment and communicate our commitment to an incident and injury free workplace.
Our policies, procedures, written statements, and formalized plans that support our SMS activities are available to all managers through our intranet site.

Continuous Awareness and Safety Communication

Management and supervisors will facilitate in daily safety communication and planning engagement blitzes and campaigns accordingly.
Dispatchers will play an active role in this process by delivering safety radio announcements.
The Daily Safety Message will be printed and posted throughout the facility.

Material that supports the monthly fleet safety topic and/or injury prevention topic that is distributed from corporate will be displayed throughout the facility.

- Employee engagement and buy-in
- Accountability and ownership of employees
- Positive recognition
- Reinforcement of safe behaviors
- Safety award programs
- Administration of the Katherine McClary Safe Operator Award program
- Safety campaigns and blitzes
- Incentive and reward contests

Supervisors and managers will pay attention to, measure, and publicly acknowledge the desired behaviors and performance outcomes by workers. The purpose of this and other safety-related programs is to focus our employees on working safely, and then reward them for their success.

Communication of SMS

A variety of methods may be used to communicate the SMS plan, including updates or memos. Communication can include updates related to SMS concerns/issues, lessons learned, analysis, new requirements or tracking mechanisms, and/or roles and responsibilities.

It is the responsibility of the location management to train employees on how to identify and report hazards. Management and supervisors will encourage employees to report their safety concerns or hazards.

Safety actions that are taken in response to reports submitted through the ESRP will be communicated to employees during the safety meetings or posted in a common area.

Competencies and Training

Job-specific training programs have been developed to enhance safety skills necessary for safe, secure, and reliable customer service. This includes training for operators, trainers, supervisors, maintenance staff, operations, and management personnel.

MV Transportation maintains a continuous safety communication campaign through the form of safety meetings (Safety Policy S-27). Every month, a fleet safety and injury prevention topic will be reviewed to refresh the fundamentals and key learning points. Annual refresher training on key areas will also be conducted along with periodic promotion of prevention activities.

Maintenance monthly training will focus on OSHA compliance for shop safety. The training complies with current state and federal standards and covers potential safety and health hazards as well as safe work practices and procedures to eliminate or minimize hazards. Information concerning safety hazards or issues is provided to employees through new hire orientation, location safety committee meeting minutes, company-wide or departmental meetings, Safety Team briefings, monthly safety meetings, bulletin board postings, memos, or other written communications.

All MV operators will receive refresher or remedial training, as necessary, throughout their employment with the Company (Safety Policy S-12). This can include, but is not limited to, defensive driving techniques, ADA and Wheelchair Securement activities, Fatigue Management, Pedestrian and Bicyclist awareness, as well as hands-on training. This training provides a procedure for evaluation job skills and determining subsequent retraining needs for employees who are returning to work after an extended leave, employees who have been involved in an accident and refresher skill training. Training, retraining, proficiency checks, and safety meeting attendance will be recorded and documented.

MV training records are kept by the department supervisors and managers and will include:
Date of training
Employee names
Copies of training materials
Training subject
Location of training
Name of trainer
Signature of trainer and trainee

A training audit and training needs assessment will be conducted at least bi-annually, or as a result of activities that come out of the SRM process.

Safety Culture

Safety is a core business value at MV Transportation, LADOT's bus operations contractor. Their Safety Culture Guide outlines the importance of implementing initiatives at the local level to promote a positive safety culture.

To foster a positive safety culture, supervisors and management should make every effort to demonstrate their commitment to safety, offering the highest level of respect and dignity and a genuine concern for the welfare of their workers. Supervisors and management will exhibit the behaviors they want to see as part of their location's safety culture.
Elements of our Safety Culture Guide include:

Employee engagement and buy-in
Accountability
Positive recognition
Reinforcement of safe behaviors
Safety award programs
Administration of the Katherine McClary Safe Operator Award program
Safety campaigns and blitzes
Incentive and reward contests
Supervisors and managers will pay attention to, measure, and publicly acknowledge the desired behaviors and performance outcomes by workers. The purpose of this and other safety-related programs is to focus our employees on working safely, and then reward them for their success.

Safety Communication

Communication of the SMS
A variety of methods may be used to communicate the SMS plan, including updates or memos. Communication can include updates related to SMS concerns/issues, lessons learned, analysis, new requirements or tracking mechanisms, and/or roles and responsibilities.

It is the responsibility of the location management to train employees on how to identify and report hazards. Management and supervisors will encourage employees to report their safety concerns or hazards.

Safety actions that are taken in response to reports submitted through the ESRP will be communicated to employees during the safety meetings or posted in a common area.
Our Policy and Commitment to Safety statement will be distributed to all managers to be reviewed with all employees during initial onboarding. This will be reviewed at least annually to continuously promote a safe work environment.

Policies, procedures, written statements, and formalized plans that support our SMS activities are available to all managers through our intranet site.

Continuous Awareness and Safety Communication

Management and supervisors will facilitate daily safety communication and planning engagement blitzes and campaigns accordingly. Dispatchers will play an active role in this process by delivering safety radio announcements.

The Daily Safety Message will be printed and posted throughout the facility. Material that supports the monthly fleet safety topic and/or injury prevention topic that is distributed from corporate will be displayed throughout the facility. Additional means of communication includes:

• New Hire Orientation Training • Operational Safety Calls • Safety Meetings • One-on-one dialogue between supervisors and employees • Safety Briefings/Toolbox Talks	• Safety Bulletin Board • Safety Committees • Posters, Flyers, & Memos • E-mail Communications • Internal Websites • Video/TV Displays

MV Supporting Resources

Maintenance Shop Safety Handbook Vehicle Maintenance Plan (PM) Aerial Platform Certification Powered Industrial Truck (Forklift) Certification Clean Air Act (608,609) Noise Protection Lock Out/Tag Out Personal Protective Equipment Respiratory Protection Welding, Cutting and Brazing Safety OSHA 10-Hour OSHA 30- Hour Heat Stress Housekeeping HAZCOM Bloodborne Pathogens	Employee Handbook Safety Manual New Hire Orientation Fitness for Duty Evaluation Operations Policies and Procedures Handbook Recruiting and Hiring Practices Incident Management and Investigation Safety Audits/Inspections Safety Reports and Forms Safety Communication TV Displays Wheelchair Certifications Defensive Driving Program Operator Refresher Training Safety Committees Safety Calendar – Weekly & Monthly Topics Bi-monthly Safety Stand-down	Code of Federal Regulations (CFR) Crime Prevention Environmental Design (CPTED) Emergency Action Plan Fire Prevention Plan HAZCOM Plan Hearing Conservation Program Heat Illness Prevention Lockout Tagout Program Safety and Security Program System Safety Program Plan System security and Emergency Preparedness Plan KMA Safe Driver Award Program Monthly Safety Meetings Customer Service Training Continuity of Operations Plan

APPENDIX A

Appendix A includes MV tables and materials published or distributed in training sessions pertaining to the Agency Safety Plan.

Hazard Probability Table

Probability Level	Description
A – Frequent	Likely to occur frequently. Continually experienced in the fleet/inventory.
B – Probable	Likely to occur several times in the life of an item. Likely to occur frequently in the fleet/inventory.
C – Occasional	Likely to occur sometime in life of an item. Likely to occur several times in the fleet/inventory.
D – Remote	Unlikely, but possible to occur in the life of an item. Reasonably expected in the fleet/inventory.
E – Improbable	So unlikely, occurrence is not expected. Unlikely to occur, but possible in the fleet/inventory.

Risk Assessment Frequency/Severity Matrix

	Severity			
Frequency	1 Catastrophic	2 Critical	3 Marginal	4 Negligible
A – Frequent	1/A	2/A	3/A	4/A
B – Probable	1/B	2/B	3/B	4/B
C – Occasional	1/C	2/C	3/C	4/C
D – Remote	1/D	2/D	3/D	4/D
E – Improbable	1/E	2/E	3/E	4/E

Hazard Resolution Table

Severity / Frequency	Resolution
1/A | 1/B | 1/C | 2/A | 2/B | 3/A |	Unacceptable—correction required.
1/D | 2/C | 2/D | 3/B | 3/C |	Unacceptable—correction may be required after review by the CEO.
1/E | 2/E | 3/D | 3/E | 4/A | 4/B |	Acceptable—with review by CEO.
4/C | 4/D | 4/E |	Acceptable—without review.

Reporting Form

This report concerns:	☐ Hazard ☐ Risk ☐ Near Miss ☐ Other	
Hazard Type:	☐ Policy/Procedure ☐ Operational ☐ Environmental ☐ Equipment/Design ☐ Training	
REPORTED BY:	☐ Employee ☐ Customer/Passenger ☐ Other:	Ie FD or PD
NAME:		LOCATION:
Description of Safety Concern:		

PHOTOS:	☐ Yes ☐ No
Hazard Analysis: According to Hazard Severity Matrix	☐ 1 Catastrophic ☐ 2 Critical ☐ 3 Marginal ☐ 4 Negligible
Recommended Safety Risk Mitigation:	
Supervisor/Safety Manager Comments/Actions:	

Supervisor/Safety Manager:	

Hazard/Risk Resolution		
Is Hazard/Risk corrected "On the Spot"?	☐ Yes ☐ No	If the answer is "No" then proceed with the steps below:
This report must be forwarded to the SAFETY DEPARTMENT; report is assigned to specific department(s) for hazard rectification; report is assigned a priority		

Priority:	☐ High ☐ Medium ☐ Low		
Hazard/Risk/ Near Miss deficiency corrected?	☐ Yes ☐ No	Date closed if "Yes"	Date
If the answer is NO, notify the Safety department to begin continuing action for resolution, and send it to the Safety Team or Staff for recommendations.			
List how the Hazard/Risk/Near Miss was resolved			
Date Resolved	Click or tap to enter a date.		

Appendix B

Full Text Part 673 of FTA Regulations

PART 673—PUBLIC TRANSPORTATION AGENCY SAFETY PLANS Subpart A—General 673.1 Applicability. 673.3 Policy. 673.5 Definitions. Subpart B—Safety Plans 673.11 General requirements. 673.13 Certification of compliance. 673.15 Coordination with metropolitan, statewide, and non-metropolitan planning processes. Subpart C—Safety Management Systems 673.21 General requirements. 673.23 Safety management policy. 673.25 Safety risk management. 673.27 Safety assurance. 673.29 Safety promotion. Subpart D—Safety Plan Documentation and Recordkeeping 673.31 Safety plan documentation. Authority: 49 U.S.C. 5329(d) and 5334; 49 CFR 1.91. Subpart A—General § 673.1 Applicability. (a) This part applies to any State, local governmental authority, and any other operator of a public transportation system that receives Federal financial assistance under 49 U.S.C. Chapter 53. (b) This part does not apply to an operator of a public transportation system that only receives Federal financial assistance under 49 U.S.C. 5310, 49 U.S.C. 5311, or both 49 U.S.C. 5310 and 49 U.S.C. 5311. § 673.3 Policy. The Federal Transit Administration (FTA) has adopted the principles and methods of Safety Management Systems (SMS) as the basis for enhancing the safety of public transportation in the United States. FTA will follow the principles and methods of SMS in its development of rules, regulations, policies, guidance, best practices, and technical assistance administered under the authority of 49 U.S.C. 5329. This part sets standards for the Public Transportation Agency Safety Plan, which will be responsive to FTA's Public Transportation Safety Program, and reflect the specific safety objectives, standards, and priorities of each transit agency. Each Public Transportation Agency Safety Plan will incorporate

SMS principles and methods tailored to the size, complexity, and scope of the public transportation system and the environment in which it operates. § 673.5 Definitions. As used in this part: Accident means an Event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause. Accountable Executive means a single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset 34466 Federal Register / Vol. 83, No. 139 / Thursday, July 19, 2018 / Rules and Regulations recipient or subrecipient's Public Transportation Agency Safety Plan. Event means any Accident, Incident, or Occurrence. FTA means the Federal Transit Administration, an operating administration within the United States Department of Transportation. Hazard means any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment. Incident means an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency. Investigation means the process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk. National Public Transportation Safety Plan means the plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53. Occurrence means an Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency. Operator of a public transportation system means a provider of public transportation as defined under 49 U.S.C. 5302(14). Performance measure means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets. Performance target means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA). Public Transportation Agency Safety Plan means the documented comprehensive agency safety plan for a transit agency that is required by 49 U.S.C. 5329 and this part. Rail fixed guideway public transportation system means any fixed guideway system that uses rail, is operated for public transportation, is within the jurisdiction of a State, and is not subject to the jurisdiction of the Federal Railroad Administration, or any such system in engineering or construction. Rail fixed guideway public transportation systems include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley, inclined plane, funicular, and automated guideway. Rail transit agency means any entity that provides services on a rail fixed guideway public transportation system. Risk means the composite of predicted severity and

likelihood of the potential effect of a hazard. Risk mitigation means a method or methods to eliminate or reduce the effects of hazards. Safety Assurance means processes within a transit agency's Safety Management System that functions to ensure the implementation and effectiveness of safety risk mitigation, and to ensure that the transit agency meets or exceeds its safety objectives through the collection, analysis, and assessment of information. Safety Management Policy means a transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety. Safety Management System (SMS) means the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards. Safety Management System (SMS) Executive means a Chief Safety Officer or an equivalent. Safety performance target means a Performance Target related to safety management activities. Safety Promotion means a combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system. Safety risk assessment means the formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks. Safety Risk Management means a process within a transit agency's Public Transportation Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk. Serious injury means any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received; (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses); (3) Causes severe hemorrhages, nerve, muscle, or tendon damage; (4) Involves any internal organ; or (5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface. Small public transportation provider means a recipient or subrecipient of Federal financial assistance under 49 U.S.C. 5307 that has one hundred (100) or fewer vehicles in peak revenue service and does not operate a rail fixed guideway public transportation system. State means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands. State of good repair means the condition in which a capital asset is able to operate at a full level of performance. State Safety Oversight Agency means an agency established by a State that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth in 49 CFR part 674. Transit agency means an operator of a public transportation system. Transit Asset Management Plan means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation, as required by 49 U.S.C. 5326 and 49 CFR part 625. Subpart B—Safety Plans § 673.11 General requirements. (a) A transit agency must, within one calendar year after July 19, 2019, establish a Public Transportation Agency Safety Plan that meets the requirements of this part and, at a minimum, consists of the following elements: (1) The Public Transportation Agency Safety Plan, and subsequent updates, must be signed by the

Accountable Executive and approved by the agency's Board of Directors, or an Equivalent Authority. (2) The Public Transportation Agency Safety Plan must document the processes and activities related to Safety Management System (SMS) implementation, as required under subpart C of this part. (3) The Public Transportation Agency Safety Plan must include performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. (4) The Public Transportation Agency Safety Plan must address all applicable requirements and standards as set forth in FTA's Public Transportation Safety Program and the National Public Transportation Safety Plan. Compliance VerDate Sep2014 18:39 Jul 18, 2018 Jkt 244001 PO 00000 Frm 00050 Fmt 4701 Sfmt 4700 E:\FR\FM\19JYR2.SGM 19JYR2 gradovich on DSK3GMQ082PROD with RULES Federal Register / Vol. 83, No. 139 / Thursday, July 19, 2018 / Rules and Regulations 34467 with the minimum safety performance standards authorized under 49 U.S.C. 5329(b)(2)(C) is not required until standards have been established through the public notice and comment process. (5) Each transit agency must establish a process and timeline for conducting an annual review and update of the Public Transportation Agency Safety Plan. (6) A rail transit agency must include or incorporate by reference in its Public Transportation Agency Safety Plan an emergency preparedness and response plan or procedures that addresses, at a minimum, the assignment of employee responsibilities during an emergency; and coordination with Federal, State, regional, and local officials with roles and responsibilities for emergency preparedness and response in the transit agency's service area. (b) A transit agency may develop one Public Transportation Agency Safety Plan for all modes of service, or may develop a Public Transportation Agency Safety Plan for each mode of service not subject to safety regulation by another Federal entity. (c) A transit agency must maintain its Public Transportation Agency Safety Plan in accordance with the recordkeeping requirements in subpart D of this part. (d) A State must draft and certify a Public Transportation Agency Safety Plan on behalf of any small public transportation provider that is located in that State. A State is not required to draft a Public Transportation Agency Safety Plan for a small public transportation provider if that agency notifies the State that it will draft its own plan. In each instance, the transit agency must carry out the plan. If a State drafts and certifies a Public Transportation Agency Safety Plan on behalf of a transit agency, and the transit agency later opts to draft and certify its own Public Transportation Agency Safety Plan, then the transit agency must notify the State. The transit agency has one year from the date of the notification to draft and certify a Public Transportation Agency Safety Plan that is compliant with this part. The Public Transportation Agency Safety Plan drafted by the State will remain in effect until the transit agency drafts its own Public Transportation Agency Safety Plan. (e) Any rail fixed guideway public transportation system that had a System Safety Program Plan compliant with 49 CFR part 659 as of October 1, 2012, may keep that plan in effect until one year after July 19, 2019. (f) Agencies that operate passenger ferries regulated by the United States Coast Guard (USCG) or rail fixed guideway public transportation service regulated by the Federal Railroad Administration (FRA) are not required to develop agency safety plans for those modes of service. § 673.13 Certification of compliance.

(a) Each transit agency, or State as authorized in § 673.11(d), must certify that it has established a Public Transportation Agency Safety Plan meeting the requirements of this part one year after July 19, 2019. A State Safety Oversight Agency must review and approve a Public Transportation Agency Safety Plan developed by rail fixed guideway system, as authorized in 49 U.S.C. 5329(e) and its implementing regulations at 49 CFR part 674. (b) On an annual basis, a transit agency, direct recipient, or State must certify its compliance with this part. § 673.15 Coordination with metropolitan, statewide, and non-metropolitan planning processes. (a) A State or transit agency must make its safety performance targets available to States and Metropolitan Planning Organizations to aid in the planning process. (b) To the maximum extent practicable, a State or transit agency must coordinate with States and Metropolitan Planning Organizations in the selection of State and MPO safety performance targets. Subpart C—Safety Management Systems § 673.21 General requirements. Each transit agency must establish and implement a Safety Management System under this part. A transit agency Safety Management System must be appropriately scaled to the size, scope and complexity of the transit agency and include the following elements: (a) Safety Management Policy as described in § 673.23; (b) Safety Risk Management as described in § 673.25; (c) Safety Assurance as described in § 673.27; and (d) Safety Promotion as described in § 673.29. § 673.23 Safety management policy. (a) A transit agency must establish its organizational accountabilities and responsibilities and have a written statement of safety management policy that includes the agency's safety objectives. (b) A transit agency must establish and implement a process that allows employees to report safety conditions to senior management, protections for employees who report safety conditions to senior management, and a description of employee behaviors that may result in disciplinary action. (c) The safety management policy must be communicated throughout the agency's organization. (d) The transit agency must establish the necessary authorities, accountabilities, and responsibilities for the management of safety amongst the following individuals within its organization, as they relate to the development and management of the transit agency's Safety Management System (SMS): (1) Accountable Executive. The transit agency must identify an Accountable Executive. The Accountable Executive is accountable for ensuring that the agency's SMS is effectively implemented, throughout the agency's public transportation system. The Accountable Executive is accountable for ensuring action is taken, as necessary, to address substandard performance in the agency's SMS. The Accountable Executive may delegate specific responsibilities, but the ultimate accountability for the transit agency's safety performance cannot be delegated and always rests with the Accountable Executive. (2) Chief Safety Officer or Safety Management System (SMS) Executive. The Accountable Executive must designate a Chief Safety Officer or SMS Executive who has the authority and responsibility for day-to-day implementation and operation of an agency's SMS. The Chief Safety Officer or SMS Executive must hold a direct line of reporting to the Accountable Executive. A transit agency may allow the Accountable Executive to also serve as the Chief Safety Officer or SMS Executive. (3) Agency leadership and executive management. A transit agency must identify those members of its leadership or executive management, other

than an Accountable Executive, Chief Safety Officer, or SMS Executive, who have authorities or responsibilities for day-today implementation and operation of an agency's SMS. (4) Key staff. A transit agency may designate key staff, groups of staff, or committees to support the Accountable Executive, Chief Safety Officer, or SMS Executive in developing, implementing, and operating the agency's SMS. § 673.25 Safety risk management. (a) Safety Risk Management process. A transit agency must develop and implement a Safety Risk Management process for all elements of its public transportation system. The Safety Risk VerDate Sep2014 18:39 Jul 18, 2018 Jkt 244001 PO 00000 Frm 00051 Fmt 4701 Sfmt 4700 E:\FR\FM\19JYR2.SGM 19JYR2 gradovich on DSK3GMQ082PROD with RULES2 34468 Federal Register / Vol. 83, No. 139 / Thursday, July 19, 2018 / Rules and Regulations Management process must be comprised of the following activities: Safety hazard identification, safety risk assessment, and safety risk mitigation. (b) Safety hazard identification. (1) A transit agency must establish methods or processes to identify hazards and consequences of the hazards. (2) A transit agency must consider, as a source for hazard identification, data and information provided by an oversight authority and the FTA. (c) Safety risk assessment. (1) A transit agency must establish methods or processes to assess the safety risks associated with identified safety hazards. (2) A safety risk assessment includes an assessment of the likelihood and severity of the consequences of the hazards, including existing mitigations, and prioritization of the hazards based on the safety risk. (d) Safety risk mitigation. A transit agency must establish methods or processes to identify mitigations or strategies necessary as a result of the agency's safety risk assessment to reduce the likelihood and severity of the consequences. § 673.27 Safety assurance. (a) Safety assurance process. A transit agency must develop and implement a safety assurance process, consistent with this subpart. A rail fixed guideway public transportation system, and a recipient or subrecipient of Federal financial assistance under 49 U.S.C. Chapter 53 that operates more than one hundred vehicles in peak revenue service, must include in its safety assurance process each of the requirements in paragraphs (b), (c), and (d) of this section. A small public transportation provider only must include in its safety assurance process the requirements in paragraph (b) of this section. (b) Safety performance monitoring and measurement. A transit agency must establish activities to: (1) Monitor its system for compliance with, and sufficiency of, the agency's procedures for operations and maintenance; (2) Monitor its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended; (3) Conduct investigations of safety events to identify causal factors; and (4) Monitor information reported through any internal safety reporting programs. (c) Management of change. (1) A transit agency must establish a process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance. (2) If a transit agency determines that a change may impact its safety performance, then the transit agency must evaluate the proposed change through its Safety Risk Management process. (d) Continuous improvement. (1) A transit agency must establish a process to assess its safety performance. (2) If a transit agency identifies any deficiencies as part of its safety performance assessment, then the transit agency

must develop and carry out, under the direction of the Accountable Executive, a plan to address the identified safety deficiencies. § 673.29 Safety promotion. (a) Competencies and training. A transit agency must establish and implement a comprehensive safety training program for all agency employees and contractors directly responsible for safety in the agency's public transportation system. The training program must include refresher training, as necessary. (b) Safety communication. A transit agency must communicate safety and safety performance information throughout the agency's organization that, at a minimum, conveys information on hazards and safety risks relevant to employees' roles and responsibilities and informs employees of safety actions taken in response to reports submitted through an employee safety reporting program. Subpart D—Safety Plan Documentation and Recordkeeping § 673.31 Safety plan documentation. At all times, a transit agency must maintain documents that set forth its Public Transportation Agency Safety Plan, including those related to the implementation of its Safety Management System (SMS), and results from SMS processes and activities. A transit agency must maintain documents that are included in whole, or by reference, that describe the programs, policies, and procedures that the agency uses to carry out its Public Transportation Agency Safety Plan. These documents must be made available upon request by the Federal Transit Administration or other Federal entity, or a State Safety Oversight Agency having jurisdiction. A transit agency must maintain these documents for a minimum of three years after

they are created.

LADOT TRANSIT AGENCY SAFETY PLAN

Federal Transit Administration