

CALENDAR YEAR 2024 REPORT OF STATE SAFETY OVERSIGHT ACTIVITIES FOR RAIL FIXED GUIDEWAY PUBLIC TRANSPORTATION SYSTEMS IN CALIFORNIA



California Public Utilities Commission Rail Safety Division Roger Clugston, Director March 14, 2025 CALENDAR YEAR 2024 ANNUAL REPORT – STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

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EXECUTIVE SUMMARY

The California Public Utilities Commission (CPUC) regulates the safety and security of 15 rail transit agencies (RTAs) in California. Eight of these RTAs are jurisdictional to and funded in part by the Federal Transit Administration (FTA). The Rail Safety Division's (RSD) Rail Transit Safety Branch (RTSB) is responsible for the CPUC's rail transit safety oversight program.

This report is part of the CPUC's annual reporting requirements regarding its rail transit safety program. There are two elements of annual reporting to FTA that the CPUC must meet. In order to comply with the regulations established by the FTA, all State Safety Oversight Agencies (SSOA) must upload certain required documents and data regarding their oversight activities each calendar year (CY) into an FTA online reporting system. The CPUC must submit these documents and data by March 15 of each year that include the following information:

- Summary of its oversight activities for the previous year.
- Description of the causal factors of accidents identified through investigation and identifies the status of corrective actions.
- Any changes to the Public Transportation Agency Safety Plans of each FTA-regulated RTA; and
- The level of effort by the SSOA in carrying out its oversight activities.

In addition, FTA regulations require that at least once a year, the SSOA report the status of the safety of each RTA under their jurisdiction which receives federal funding from the FTA to their Governor, the FTA, and the board of directors, or equivalent entity, of RTAs.

This report summarizes the data and information submitted to the FTA's online reporting system, outlining CPUC's rail transit safety program and RTSB's activities for CY 2024. Specifically, this report summarizes the CPUC staff hours and core activities that comprise the safety oversight effort of the program and the audit, inspection, investigation, and capital project oversight activities conducted in carrying out the program in CY 2024. In addition, data and information for all RTAs, information regarding the types of accidents each RTA has reported, and the primary causal factors for those accidents are discussed.

CPUC Staff Resources Devoted to Rail Transit Safety Oversight

In CY 2024, CPUC staff (including staff from RTSB and other RSD branches, and the Legal and Administrative Law Judges Divisions) performed 60,419 hours of safety and security oversight activities during the reporting period, for both non-FTA funded and FTA funded RTA's, this was a 1.74% increase over the previous year. This increase is primarily due to vacancies being filled in 2024.

Due to the expansion of rail transit systems and the projects approved and under construction or in final engineering, as well as new FTA requirements for risk-based inspections (RBI), RSD requested additional staffing resources and was granted seven new positions in 2024 consisting of one Project

Program Supervisor, one Senior Utilities Engineer (Specialist), one Utilities Engineer and four inspectors (Operations, Track, Signal and Train Control, and Mechanical/Equipment).

Field Inspections of Rail Transit Facilities, Vehicles, and Operations

RTSB inspectors conducted 432 inspections during CY 2024, while participating in numerous accident investigations. This was a 25.9% decrease from the previous year's inspection counts. The decrease was due to the following:

- Inspectors participated in four (4) separate RTA triennial audits performed in CY 2024, which are not included in the inspection counts. For inspectors, triennial audits require extensive planning, field inspections, many follow-ups, writing up their findings of non-compliance, and recommendations for the audit report. Typically, it takes each Inspector 4-6 weeks to complete per involved inspector for each RTA triennial audit;
- Formulation of new regulatory policies and procedures to implement CPUC's Risk-Based Inspection Programs, including extensive meetings with RTAs and increased inspector training requirements; and
- Inspectors increased reviewing of test reports, attending project meetings, conducting field testing and assisting with technical issues for some of the Capital Projects, discussed in the Summary of Oversight Activities for the individual RTAs write-ups.

Accident Investigations

RTAs reported 319 rail transit accidents during CY 2024. CPUC staff investigated and/or reviewed and approved most of the RTA reports for these accidents, however some still remain open and under investigation. The purpose of the accident investigation reports is to assure the RTA identified the causal and contributory factors leading to the accident to prevent recurrence. The largest percentage (approximately 53%) are related to collisions with vehicles at rail crossings or along street-running transit lines. Data provided herein indicates the number and types of accidents for all agencies and also by individual RTA.

Capital Projects

CPUC staff spend a significant portion of their time on safety oversight of RTA capital projects. California RTAs have numerous capital projects, particularly in the Los Angeles area as they prepare for the International Federation of Association Football (FIFA) World Cup matches in 2026, Super Bowl LXI in 2027, and the 2028 Summer Olympics. All three events will be hosted by the City of Los Angeles. Capital projects include new vehicle procurement projects, line extensions for service to new areas, new train control systems, seismic retrofit projects, and others. There are many major rail transit projects in California that are in active stages of construction, as detailed herein. The number of hours CPUC staff have spent on Capital Projects has decreased by approximately 22.4% from 6,224 in 2023 to 4,827 in 2024. This decrease is due to staff spending 4,216 more hours in 2024 on triennial audits, and inspectors spending 892 hours on development of the Risk-Based Inspection program , which decreased amount of hours spent on Capital Projects.

Corrective Action Plans

CPUC staff reviewed 495 Corrective Action Plans (CAPs) during CY 2024; an 11.3% decrease from the previous year. CAPs are generated from accident investigations, identified system hazards, inspections, triennial audits, internal safety audits (conducted by RTAs), consumer complaints, and potentially other sources. CPUC staff approved the closure of 369 open CAPs. The remainder are in various stages of completion and CPUC staff continue to monitor their progress.

Enforcement Actions

CPUC staff did not initiate any new citations (pursuant to RTSB Citation Program) or recommend to the Commission to initiate an Order Instituting Investigation or Order to Show Cause actions in CY 2024. Instead CPUC staff worked with the RTAs in addressing several issues of non-compliance with additional meetings with RTA leadership and field activities to resolve areas of safety concern.

New Risk-Based Inspection (RBI) Program

As required by the Bipartisan Infrastructure Law, on October 21, 2022, the FTA issued Special Directive 22-25 to the CPUC (as it did to all other SSOAs in the nation) directing the CPUC to submit by October 21, 2024, documentation that demonstrates it has developed a Risk-Based Inspection (RBI) program in accordance with the requirements of the directive; and within one year of FTA's approval of CPUC's RBI program, submit documentation that demonstrates the CPUC has implemented the approved program for at least six months.

On August 23, 2024, CPUC submitted its RBI Program Plan to the FTA. On November 12, 2024, the FTA approved CPUC's RBI Program Plan. On December 18, 2024, RTSB issued its revised Program Standard in order to meet the specific requirements of the FTA's Special Directive. Since RTSB already has a mature inspection program, the changes were largely related to data acquisition and analysis components of the new requirements.

Prior to adopting its formal RBI Program, CPUC's rail transit inspectors prioritized and conducted their inspections based on an informal process considering the following criteria:

- Routine inspection findings at a specific RTA or other RTAs
- RTA size (because they have more inspection points) and complexity (different types of vehicles such as cable cars, heavy rail, light rail; and different operating characteristics such as subway, light rail, and automated people mover)
- Accident investigations
- Capital project reviews
- FTA Safety Advisories
- FTA Request for Information
- Information from FTA on safety issues found at RTAs in other states to make sure the same issues do not exist with California RTAs

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• Federal Railroad Administration and NTSB accident findings and recommendations

As a result of adopting the new formal FTA-approved RBI Program, CPUC's rail transit inspectors started collecting and analyzing significantly more data, and prioritizing inspections based on their analysis.

Typically, the RTAs have personnel who perform regular maintenance and conduct inspections on their system (rail tracks, rail vehicles, power systems, etc.) RTA personnel keep records of all their activities. Many RTAs use databases for tracking this data, which provide reminders whenever maintenance and inspection activities are due and generate reports for supervisor/manager reviews. Some RTAs use paper records kept in binders or other such methods. In addition to conducting inspections of RTA systems (track, operating practices, equipment/vehicle, signal and train control systems) themselves, RTSB inspectors also review randomly selected records (either paper or digital) of inspections/maintenance activities conducted by RTA personnel. Considering the large volume of these types of records generated by RTAs, CPUC inspectors have been able to randomly inspect only a small percentage of the available RTA data during their field inspections to maximize field inspection time. By virtue of adopting the RBI Program, RTSB will be able to review a larger percentage of the records.

As part of the new program development, RTSB has been collaborating with the RTAs in assessing data sharing needs. First, RTSB prepared a list of RTA inspection areas and maintenance activities that its inspectors will regularly collect data on and have met with each RTA to identify specific RTA records, sharing mechanisms and frequency, to formalize the data sharing process. CPUC inspectors indicated to the RTAs that this will be an iterative process, that will be refined over time as a result of continuous reassessment of the effectiveness of the selected records in providing the data and information to identify risks and trends.

Once the data is transmitted to CPUC, the inspection team will conduct a documented review of the data to make such an evaluation. The information gleaned from the data review and analysis will be used to identify CPUC inspection needs for certain RTAs or areas of that RTA that should be further inspected or followed up on to investigate any trends or specific items that are identified. This is the primary goal of the FTA requirement for SSOA acquisition and analysis of RTA data to "inform" the CPUC's inspection prioritization process.

BACKGROUND

The US Congress enacted, and President Obama signed into law, the Moving Ahead for Progress in the 21st Century Act (MAP-21) on July 6, 2012. Among several other things, MAP-21 required the FTA to adopt a comprehensive Public Transportation Safety Program, one element of which is to strengthen the rail transit State Safety Oversight program of the FTA required by 49 CFR Part 659 in effect at that time, and which was replaced by Part 674. In 2024, the FTA revised Part 674 to address new requirements from the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL), which was signed into law by President Biden on November 15, 2021.

The CPUC has a long-standing rail transit safety oversight program which pre-dates the federal program. The federal program began in the early 1990's, and the CPUC was given authority by the California legislature as early as the mid-1950's over the safety of rapid transit systems in California, at first by individual RTAs as they were created. In the 1970's, during the construction of the Bay Area Rapid Transit (BART) system, that authority was broadened by the legislature to include all systems. Specifically, California Public Utilities Code § 99152¹ makes all fixed guideway public transportation systems in California planned, acquired, or constructed, on or after 1979 subject to the regulations of the CPUC. The CPUC has developed a rigorous and comprehensive program over the years to assure the safety of systems under its jurisdiction. The CPUC has adopted Strategic Directive Statements that collectively define the universe of results the CPUC expects our organization to achieve, and RTSB participates in that process and its safety oversight activities support achieving many of those Strategic Directives.

On October 13, 1992, pursuant to the requirements of the federal Intermodal Surface Transportation Efficiency Act of 1991, Governor Pete Wilson designated the CPUC as the state agency charged with overseeing the development and implementation of safety plans for all fixed guideway transit systems in California, referred to as the State Safety Oversight Agency (SSOA) by the FTA. Subsequently, in 1996 the FTA adopted 49 CFR Part 659, which was the federal regulation for SSOAs such as the CPUC, which describes requirements to meet regarding its public transportation fixed guideway safety oversight obligations.

¹ Public Utilities Code §99152 states "Any public transit guideway planned, acquired, or constructed, on or after January 1, 1979, is subject to regulations of the Public Utilities Commission relating to safety appliances and procedures. The commission shall inspect all work done on those guideways and may make further additions or changes necessary for the purpose of safety to employees and the general public. The commission shall develop an oversight program employing safety planning criteria, guidelines, safety standards, and safety procedures to be met by operators in the design, construction, and operation of those guideways. Existing industry standards shall be used where applicable. The commission shall enforce the provisions of this section."

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MAP-21 requires the FTA to develop certification requirements for SSOAs, such as the CPUC, and provides grants to eligible states to develop or carry out rail fixed guideway public transportation safety oversight programs. The FTA developed interim certification requirements based on the Congressional direction provided by MAP-21 until it took the steps to develop regulations to strengthen 49 CFR Part 659. On October 1, 2013, the FTA certified the CPUC SSOA program as one of only two in the nation whose existing program met all <u>interim certification</u> requirements and thus was made eligible for grant funding. Subsequently, the CPUC issued Resolution ST-169 (10/2/2014), which authorized CPUC staff to apply for the available grant funding for the CPUC's SSOA program. On July 2, 2015, the FTA approved CPUC's first SSOA grant funding application. The CPUC has applied for and received ten grants thus far totaling \$47,484,559.

As required by MAP-21, to strengthen the SSOA program requirements of 49 CFR Part 659, the FTA adopted new requirements in 49 CFR Part 674, which became effective on April 15, 2016. Under the MAP-21 requirements, three years from that date (April 15, 2019) 49 CFR Part 659 was rescinded and only 49 CFR Part 674 provides authority for the SSOA program.

With the adoption by the FTA of 49 CFR Part 674, the CPUC made changes to its fixed guideway public transportation safety oversight program in 2017 and 2018 to attain FTA full certification under Part 674 requirements. The CPUC submitted its Certification Application to the FTA and obtained certification on October 23, 2018, well ahead of the April 15, 2019, deadline.

On October 18, 2024, the FTA issued a new final rule revising 49 CFR Part 674 with an effective date of January 1, 2025, to implement new requirements of the Bipartisan Infrastructure Law, remove outdated references, and simplify notification requirements.

To comply with the regulations in 49 CFR Part 674.13(a)(7) and 49 CFR 674.39 (a)(3), every SSOA that oversees Rail Fixed Guideway Public Transportation Systems (RFGPTS, as defined in 49 CFR Part 674) must submit an Annual Report that summarizes its oversight activities for the preceding 12 months. This report describes the causal factors of accidents identified through investigation, and identifies the status of corrective actions, changes to Public Transportation Agency Safety Plans, and the level of effort by the SSOA in carrying out its oversight activities. Accordingly, this report provides the data required for CY 2024.

OVERVIEW OF CPUC'S RAIL TRANSIT SAFETY OVERSIGHT PROGRAM

The CPUC currently oversees 15 RTAs, of which eight receive FTA funding and are thus subject to FTA regulations. The remaining seven do not receive FTA funding and are not subject to FTA regulations.

RTAs Subject to FTA Regulations

- Bay Area Rapid Transit District (BART)
- Los Angeles County Metropolitan Transportation Authority (LACMTA or Metro)
- North [San Diego] County Transit District (NCTD or Sprinter)
- Orange County Transportation Authority (OCTA or OC Streetcar) (currently under construction)
- Sacramento Regional Transit District (SacRT)
- San Diego Trolley, Inc. (SDTI)
- San Francisco Municipal Transportation Agency (SFMTA or Muni)
- Santa Clara Valley Transportation Authority (VTA)

RTAs Not Subject to FTA Regulations

- Americana at Brand Trolley
- Angels Flight Railway Company (funicular)
- Getty Center Museum Automated People Mover (APM)
- The Grove Trolley
- Los Angeles World Airports (LAWA) Automated People Mover (currently under construction)
- Sacramento County Department of Airports (SCDOA) Automated People Mover
- San Francisco International Airport (AirTrain) Automated People Mover

In addition, the following systems are in various stages of development and have not yet been awarded full grant funding from the FTA:

- Inglewood Transit Connector Project
- Los Angeles Streetcar (City of Los Angeles)

Rail Transit Safety Branch Structure

RTSB is responsible for conducting the CPUC's rail transit safety oversight program activities. RTSB has 39 authorized staff positions to provide effective safety oversight of the rail transit and other fixed guideway systems under the CPUC's jurisdiction. RTSB has four Sections: Rail Transit Safety Section (engineers and analysts) – North, Rail Transit Safety Section – South, Rail Transit Operations Safety Section (field inspectors) – North, and Rail Transit Operations Safety Section - South. Each Section has Supervisors and Senior Engineer (Supervisors) or Senior Inspectors to guide their respective teams in Northern and Southern California as shown in Figure 1.

FTA requires SSOAs to develop qualified staff to conduct the rail transit safety oversight activities and provide them with a minimum level of initial and refresher training pursuant to 49 CFR Part 672 (FTA's Public Transportation Safety Certification Training Program rules). RTSB staff are highly qualified, and RTSB developed and submitted to the FTA a Technical Training Plan (TTP) as part of the FTA certification process. RTSB follows that plan and annually reviews, updates as necessary, and provides the FTA with the latest version of its TTP.

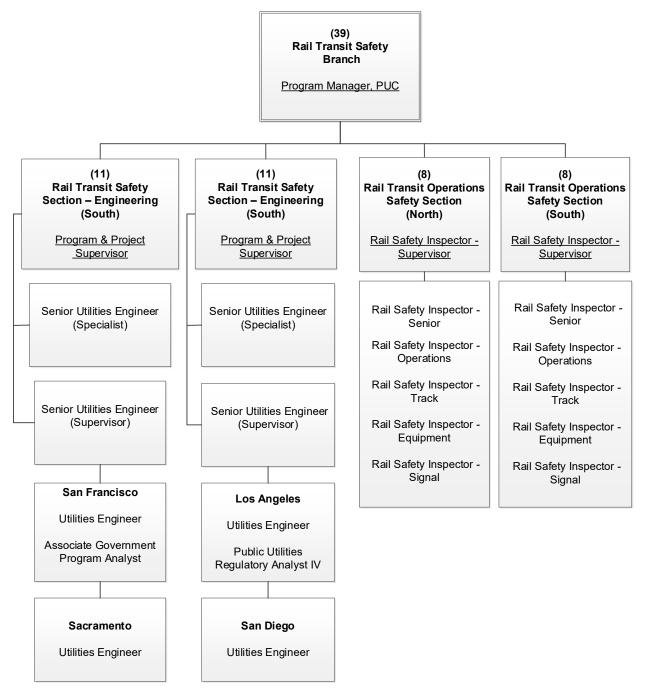


Figure 1: RTSB Organization Chart

RTSB's State Safety Oversight Agency Program Standard - Procedures Manual

49 CFR Part 674.27 requires SSOAs to adopt and distribute a written program standard (procedures manual) and at least once a year submit it to the FTA with an indication of any revisions made. Accordingly, RTSB's *Program Standard – Procedures Manual State Safety and Security Oversight of Rail Fixed Guideway System* (Program Standard) identifies staff positions responsible for, and describes the practices to be followed in, conducting its SSOA program; sets forth the processes and procedures RTSB uses in implementing the various aspects of the safety oversight program; and is posted on the CPUC's web site at www.cpuc.ca.gov/rtsb.

RTSB's Program Standard includes, but is not limited to:

- System safety and security program management and oversight of the design, construction, safety certification, internal safety and security audits, operation and maintenance of rail fixed guideway transportation systems.
- Review and approval of RTA's Public Transportation Agency Safety Plan, System Security Plan, Safety Certification Plans, accident investigation procedures, accident investigation reports, annual internal safety and security audit reports, hazard management program, and corrective action plans and schedules.
- Reporting and investigating safety events and hazards.
- Performing triennial audits.
- Routine and Risk-based Inspections.
- Hazard management.
- Handling formal and informal complaints.
- Procedure for Enforcement Actions.

FTA Audit of CPUC's State Safety Oversight Program for RFGPTS

49 CFR Part 674.11 requires the FTA to audit each state's compliance with their SSO program at least triennially. An FTA audit team conducted the on-site portion of CPUC's triennial audit from July 11–19, 2022. The FTA audit team requested significant documentation and records in advance, and additional supporting documentation, as necessary, during the on-site portion. In addition to interviewing CPUC staff and reviewing CPUC records, the FTA audit team also interviewed RTA personnel on-site.

CPUC received the FTA report on January 9, 2023. The FTA audit team identified seven findings of non-compliance in the FTA report. During CY 2024, CPUC staff worked with FTA to close out all identified findings of non-compliance. On October 21, 2024, as a result of CPUC's submissions, FTA informed CPUC that it is satisfied with CPUC's corrective actions and relevant documentations and is able to closeout all findings of non-compliance from the FTA's audit.

RESPONDING TO SERVICE IMPACTS DUE TO NATURAL EVENTS

Impacts from Weather Events

Due to severe weather events experienced over the years, CPUC leadership has closely monitored impacts on services provided by RTAs under CPUC jurisdiction due to natural events, such as high winds, heavy rains, high heat events, earthquakes, etc. due to CPUC's role in the state-wide California Governor's Office of Emergency Services (Cal OES) group that may be convened when such events occur. California has been experiencing more atmospheric weather events than in the past. To facilitate reporting of impacts to RTA systems and to assist CPUC staff reporting the impacts to Commission executives, CPUC has a sub-category for these natural caused events on its accident reporting webform.

DATABASE SYSTEM UPDATES

Rail Safety and Security Information Management System (RSSIMS)

The CPUC's Rail Safety Division (RSD) uses a centralized database called Rail Safety and Security Information Management System (RSSIMS). RSD is currently undertaking a project to replace the existing outdated version of RSSIMS, which will ensure the database meets current state requirements and provides enhanced features. The RSSIMS build phase began in September 2022 and started the testing phase at the beginning of the fourth quarter of 2023. The project is nearly completed. Launch of Release 1 of the database occurred in the fourth quarter of 2024. There will be additional updates/releases in early 2025.

GENERAL ORDER UPDATES

General Order 164: Rules and Regulations Governing State Safety Oversight of Rail Fixed Guideway Systems

On October 18, 2024, the FTA issued a final rule revising 49 CFR Part 674, State Safety Oversight, with an effective date of January 1, 2025. Some of the major changes in this final rule include updated definitions, immediately reportable safety events and removing outdated references. In order to make GO 164-E compliant with the revised Part 674, in January 2025 GO 164-E will be revised and adopted as GO 164-F.

General Order 175: Rules and Regulations Governing Roadway Worker Protection Provided by Rail Transit Agencies and Rail Fixed Guideway Systems

On October 31, 2024, FTA issued a final rule 49 CFR Part 671, Rail Transit Roadway Worker Protection, with an effective date of December 2, 2024. In this final rule, FTA establishes minimum safety standards for rail transit Roadway Worker Protection (RWP) to ensure the safe operation of public transportation systems and to prevent safety events, fatalities, and injuries to transit workers who may access the roadway in the performance of work. Each RTA and SSOA may prescribe additional or

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more stringent operating rules, safety rules, and other special instructions that are consistent with this part. As part of the rule, an RTA must coordinate with an SSOA to establish an SSOA approved RWP program that meets these requirements within one calendar year from the effective date of this rule. CPUC General Order 175-A, Rules and Regulations Governing Roadway Worker Protection Provided by Rail Transit Agencies and Rail Fixed Guideway Systems, provides statewide regulations on this subject. In the fourth quarter of 2024, CPUC staff began comparing the new Part 671 to CPUC GO 175-A to identify conflicts and recommend necessary revisions to bring CPUC GO 175-A in compliance with Part 671. CPUC staff will continue working on modifying the existing General Order 175-A in 2025 to meet the deadline of December 2, 2025.

SUMMARY OF OVERSIGHT ACTIVITIES OF ALL RAIL TRANSIT AGENCIES IN CALENDAR YEAR 2024

Summary of CPUC Safety Oversight Activities

In typical years CPUC's SSOA activities fall into the following major categories:

- Conduct comprehensive triennial audits of RTAs.
- Perform ongoing inspections of RTA facilities, operations, and construction projects to assess compliance with federal and state regulations, including GOs.
- Monitor RTA operational and safety activities.
- Evaluate new Safety Certification Plans covering new major projects.
- Evaluate and recommend RTA safety plans for Commission approval.
- Make recommendations to CPUC leadership to develop new, or modify existing, CPUC General Orders related to RTA safety.
- Facilitate communication between the FTA and RTAs by notifying RTAs of all FTA Safety Directives and Safety Advisories.
- Collect data requested by the FTA from RTAs.
- Assess RTA compliance with industry standards and with the RTAs' own operating procedures.
- Review and approve accident investigation reports prepared by RTAs.
- Participate in the RTA accident or other investigations when necessary or appropriate.
- Participate in National Transportation Safety Board (NTSB) investigations when they occur at jurisdictional RTAs in California.
- Conduct its own investigations of certain accidents if RSD management deems necessary.

As shown in Table 1 below, during CY 2024 CPUC staff (including RTSB, as well as CPUC staff from the Rail Crossings and Engineering Branch of RSD, the Legal Division, and the Administrative Law Judges Division) spent 60,419.0 (56,360.5 for FTA funded RTAs plus 4,058.50 for non-FTA funded RTAs) hours in carrying out its safety and security oversight activities.

	Total Hours					
		2023		2024		
Program Activity	Non- FTA Funded	FTA Funded	Non- FTA Funded	FTA Funded		
Developing Policy/Standards, Supporting Management, Special Projects	20.0	9,416.7	0.0	9,986		
Other Transit Safety Oversight/Investigations	1,188.5	6,857.5	1,347.0	7,379		
Inspections	690.0	11,689.5	671.0	11,655		
Accident Investigations	0.0	5,412.0	6.0	4,893		
Managing/Supervising	2.0	9,133.0	0.0	7,689		
Certifying Capital Projects	656.5	5,567.8	554.0	4,273		
Triennial Audits	19.5	345.5	1,480.5	3,100		
Miscellaneous *	0.0	3,979.8	0.0	3,157		
Rail Transit Crossings	0.0	2,641.5	0.0	2,554		
Training (receiving and giving)	0.0	1,730.3	0.0	1,515		
Administrative Law Judges Division/Legal Division	0.0	34.0	0.0	156		
Total	2,576.5	56,807.5	4,058.5	56,360		
Total Staff Work Hours	s 59,384.0 60,419			60,419		

*Miscellaneous includes – Administrative Submittals, Responses to Public Records Act Requests, Responses to FTA inquiries, Responses to general inquiries, and Staff Meetings.

Table 1: Summary of SSOA Program Staff Activities for Calendar Years 2023 and 2024

Rail Transit Inspections

California has inspectors for its rail transit oversight program (in addition to inspectors in CPUC's Railroad Operations and Safety Branch for freight and commuter rail systems) with broad experience in specific rail transit disciplines that are core to the industry, who are primarily out in the field conducting facility, equipment, and operations inspections. The CPUC has developed a rigorous inspection program to determine whether the plans, procedures, processes, and training outlined in the various Standard Operating Procedures, safety plans, and other RTA documents are carried out by RTA employees in the field as they operate and maintain their system, which has been strengthened with the addition of the new Risk-Based Inspection program. This has become one of the most valuable components of the CPUC's SSOA program. Since its inception, RTSB inspectors have found RTA employees/contractors in the field straying from the established written procedures, potentially leading

to failures and sometimes accidents, which have been addressed through the CPUC's rail transit inspection program.

On November 15, 2021, President Biden signed the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act, which continues the public transportation safety program. The BIL added provisions directing the FTA to issue a Special Directive to each SSOA on the development and implementation of risk-based inspection programs. Since California has an existing inspection program, it needs to make minor adjustments to its existing program to comply with the new federal requirements. In CY 2022, RTSB management started working closely with FTA and collaborating with RTAs to revise existing procedures in order to meet the requirements of FTA's Special Directive on establishing a risk-based inspection program. On October 30, 2024, RTSB management submitted to FTA revised program standard establishing CPUC's risk-based inspection program.

RTSB inspectors performed 432 inspections in CY 2024. RTSB's inspection program is divided into the Northern California inspection team and Southern California inspection team. Each team has a supervisor, a senior inspector, and one inspector in each of the four rail transit disciplines (areas of expertise): (1) track, (2) signal and train control, (3) equipment/mechanical (rail vehicles), and (4) operating practices.

RTSB inspectors conduct both announced and unannounced inspections. Any findings of the inspections are discussed with RTA personnel before RTSB inspectors depart from the inspection site. Often, RTSB inspectors conduct joint inspections in shared rail corridors with inspectors from the CPUC's Railroad Operations and Safety Branch and/or the Federal Railroad Administration. After each inspection, RTSB senior inspector sends an inspection report to the RTA. If the inspection identifies safety concerns that require corrective action, the RTA must respond within 30 days with either completed corrective actions, or a corrective action plan (CAP) with a timeline for its implementation and the RTA personnel responsible for its completion. RTSB inspectors monitor responses and field-verify corrective actions. The inspection report record is considered closed when RTSB sends a follow-up report to the RTA accepting the CAP(s). RTSB inspectors track CAP(s) to closure.

Table 2 below summarizes the inspection activities conducted by RTSB inspectors. Inspection activities decreased from the previous year by 24.8% for FTA funded RTAs, and 35.5% for non-FTA funded RTAs, for a grand total of 25.9% decrease for all RTAs. The FTA funded RTAs are larger operations (larger systems, operating more trains, at longer distances, and transporting more passengers) than the non-FTA funded RTAs, as a result CPUC focuses majority of its activities on the FTA funded RTAs.

	Agency	Total Inspections January 1, 2023 to December 31, 2023	Total Inspections January 1, 2024 to December 31, 2024
FTA FUNDED	Bay Area Rapid Transit (BART)	90	68
	Los Angeles County Metropolitan Transportation Authority	100	45
	North [San Diego] County Transit District (Sprinter)	30	31
	Orange County Transportation Authority	3	1
	Sacramento Regional Transit District	128	73
	San Diego Trolley, Inc.	42	56
	San Francisco Municipal Transportation Agency	44	49
	Santa Clara Valley Transportation Authority	84	69
	FTA Funded Sub Total	521	392
NON-FTA FUNDED	Americana at Brand/The Grove Trolley	21	13
	Angels Flight Railway Company	15	10
	Getty Center Museum APM	8	5
	Los Angeles World Airports (LAWA) APM	1	0
	Sacramento International Airport APM	12	6
	San Francisco International Airport (AirTrain) APM	5	6
	Non-FTA Funded Sub Total	62	40
	Grand Total	583	432

Table 2: Total RTSB Inspections by Agency for Calendar Years 2023 and 2024

Accident Investigations

As prescribed in the RTSB's Program Standard, causal factors are identified through accident investigations and documented in the RSSIMS database.

RTAs are required to report accidents² and incidents³ to CPUC. GO 164-E requires RTAs to investigate, and CPUC staff to review and approve the RTA's accident investigation reports. In some cases, CPUC staff conduct separate investigations of certain accidents. CPUC staff track accident investigation



LACMTA GRADE CROSSING ACCIDENT

closeouts by RTAs and any CAP(s) associated with the accidents. In some cases, the CPUC staff may conduct additional follow-up on-site accident investigations to obtain more detailed information. The workload associated with this element is highly variable due to the number and complexity of the investigations, as well as other factors. In CY 2024 RTAs reported 319 accidents.

² Commission GO 164-E, 2.1: *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 involving a rail transit vehicle; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.

³ Commission GO 164-E, 2.13: *Incident* means an event that involves any of the following: a personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock or infrastructure that disrupts the operations of a rail transit agency.

Accident Types	LACMTA	MUNI	NCTD	SACRT	SDTI	BART	VTA	Total	Percent of Total
Train vs Vehicle	42	69	0	24	15	0	19	169	53%
Train vs Person	14	4	2	6	21	7	11	65	20.4%
/Train vs Bicycle									
/Other									
Conveyance									
(with rider)									
Other/ Train vs	11	10	0	2	1	13	6	43	13.5%
Train/ Yard									
Collision									
Mainline	2	2	0	2	2	12	3	23	7.2%
Derailment/Yard									
Derailment									
Evacuation/	0	0	1	0	0	9	0	10	3.1%
Fire/Smoke									
Train vs	4	0	1	0	0	3	1	9	2.8%
Trespasser									
Grand Total	73	85	4	34	39	44	40	319	100%

Table 3: Types of Accidents Reported by All Rail Transit Agencies in Calendar Year 2024

CALENDAR YEAR 2024 ANNUAL REPORT –STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

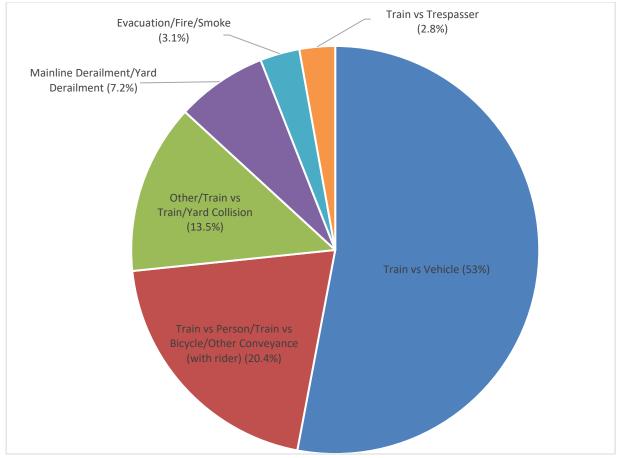


Figure 2: Types of Accidents Reported by All Rail Transit Agencies in Calendar Year 2024

NOTE: The category "Other" is comprised of all accidents not included in the other categories. These include accidents resulting in substantial damage, evacuations, or a collision with an object such as signs/poles, crossing gates, signal cabinet door, etc.

CALENDAR YEAR 2024 ANNUAL REPORT –STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

Accident Primary Causal Factors				024	
Primary Causal Factors	Total Accidents	Percentage of Accidents	Total Accidents	Percentage of Accidents	Difference between 2023 and 2024
Under Investigation	107	33.4%	114	35.7%	6.5%
Action of Motorist, Non-transit auto driver at fault	80	25%	91	28.5%	13.8%
Operating Rule Violation/ Human Factor, Employee error or organizational issue	39	12.2%	40	12.5%	2.6%
Pedestrian Actions, Pedestrian at fault	20	6.3%	26	8.2%	30%
Trespasser, Trespasser action	17	5.3%	16	5%	-5.9%
Imprudent Customer Actions, Inappropriate patron or passenger behavior on vehicles or in stations	27	8.4%	14	4.4%	-48.1%
Suicide, Suicides and suicide attempts	6	1.9%	8	2.5%	33.3%
Equipment Failure, System component failure	13	4.1%	6	1.9%	-53.8%
Poor Maintenance, System not properly maintained	3	0.9%	3	0.9%	0%
Other, Acts of Nature/ Unknown	6	1.9%	0	0%	-100%
Evacuation	2	0.6%	0	0%	-100%
Slips and Falls	0	0%	1	0.3%	N/A
Grand Total	320	100%	319	100%	-0.3%

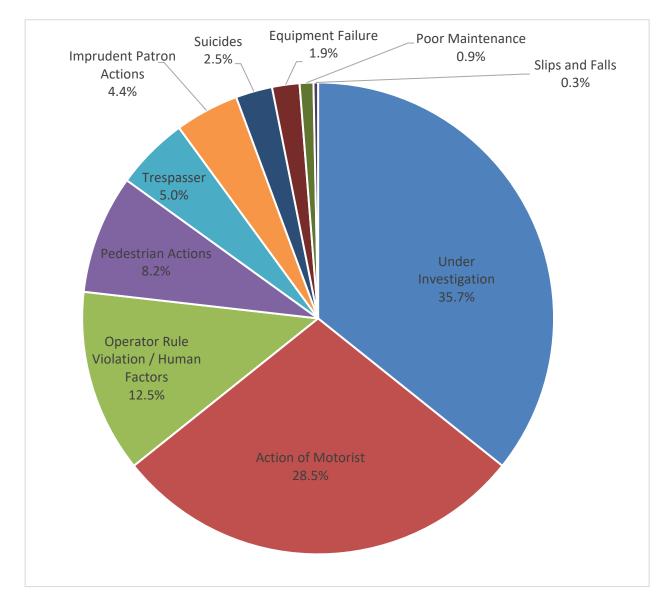


Table 4: Primary Causal Factors Identified through Accident Investigation for Calendar Years2023 and 2024

Figure 3: Primary Causal Factors Identified through Accident Investigation in Calendar Year 2024

National Transportation Safety Board (NTSB) Accident Investigations of California RTAs

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and any significant accidents in other modes of transportation – rail, highway, marine and pipeline. The NTSB determines the probable cause of accidents and issues safety recommendations aimed at preventing future recurrences.

When a rail transit accident occurs, the NTSB may initiate an accident investigation depending upon the severity of the accident. In such a case, the NTSB is responsible for leading the investigation, including the determination of facts, conditions, and circumstances, the cause or probable causes, and recommendations to reduce the likelihood of recurrence. CPUC staff will work with the NTSB and participate along with the involved RTAs in the investigation of the accident. The NTSB will typically address any accident findings through recommendations.

There are no open NTSB investigations of rail transit accidents in California.

Corrective Action Plans

As described previously, CAPs are developed by RTAs and tracked by CPUC staff. CPUC and FTA rules require RTAs to develop CAPs for addressing the findings of investigations of events; inspections; hazard management program; triennial audits conducted by CPUC; internal safety/security reviews conducted by the RTAs; and other purposes. CAPs describe the proposed corrective actions and the responsible RTA personnel who will implement and track the CAP to closure. CPUC staff review the proposed CAPs to determine their adequacy in addressing the issue, and either approve or require modifications to the CAP. CPUC staff hold routine meetings with RTA personnel to assess CAP status and update CPUC records. In CY 2024, CPUC staff reviewed 495 CAPs, as shown in Table 5 below.

CALENDAR YEAR 2024 ANNUAL REPORT -STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

	CAPs Generated in CY 2023			CAPs Get	nerated in C	Y 2024
FTA Category		CAP Status			CAP	Status
	Number	Open	Closed	Number	Open	Closed
Bay Area Rapid Transit		•				
Accident Investigation	62	26	36	87	53	34
Hazard Management	0	0	0	0	0	0
Inspection	29	10	19	40	7	33
Internal Safety Audit	0	0	0	1	0	1
Triennial Audit	0	0	0	0	0	0
Other	7	0	7	4	0	4
Sub Total	98	36	62	132	60	72
Los Angeles County Metrop	olitan Tran	sportation	Authority			
Accident Investigation	25	8	17	32	6	26
Hazard Management	0	0	0	0	0	0
Inspection	77	39	38	42	1	41
Internal Safety Audit	16	5	11	0	0	0
Triennial Audit	0	0	0	0	0	0
Other	1	0	1	0	0	0
Sub Total	119	. 52	67	74	7	67
North [San Diego] County 7						
Accident Investigation	14		8	3	0	3
Hazard Management	0	-	0	0	0	0
Inspection	26		12 0	10	3	7
Internal Safety Audit Triennial Audit	0		0	0	0	2
Other	1	-	0	0	0	0
Sub Total	41	20	21	15	3	12
Sacramento Regional Transi		20	21	15	5	12
Accident Investigation	5	4	1		3	2 1
Hazard Management	0		0		-	
Inspection	43	-	14		6 1	° °
Internal Safety Audit	7		2			8 0
Triennial Audit	0	0	0		0	0 0
Other	0	0	0		0	0 0
Sub Total	55	38	17	4	7 2	3 24
San Diego Trolley, Inc						
Accident Investigation	5		5			0 4
Hazard Management	0		0			0 0
Inspection	43		22			0 37
Internal Safety Audit	0		0			0 0
Triennial Audit	0		0			0 0
Other	0		0			$\begin{array}{c c} 0 & 0 \\ \hline 0 & 11 \end{array}$
Sub Total	48	21	27	4	-1	0 41

Table 5: Continued - Status of Corrective Action Plans by FTA Source Category for CalendarYears 2023 and 2024

	CAPs Generated in CY 2023			CAPs Generated in CY 2024							
FTA Category		CAP Status			CAP	Status					
	Number	Open	Closed	Number	Open	Closed					
San Francisco Municipal Tra	San Francisco Municipal Transportation Agency										
Accident Investigation	47	4	43	66	8	58					
Hazard Management	0	0	0	7	0	7					
Inspection	16	12	4	12	2	10					
Internal Safety Audit	0	0	0	0	0	0					
Triennial Audit	2	0	2	14	7	7					
Other	0	0	0	0	0	0					
Sub Total	65	16	49	99	17	82					
Santa Clara Valley Transport	tation Auth	ority		· · · · · · · · · · · · · · · · · · ·							
Accident Investigation	7	3	4	2	1	1					
Hazard Management	3	3	0	2	0	2					
Inspection	35	17	18	36	5	31					
Internal Safety Audit	52	39	13	7	5	2					
Triennial Audit	0	0	0	0	0	0					
Other	0	0	0	15	3	12					
Sub Total	97	62	35	62	14	48					
Americana At Brand Trolley											
Accident Investigation	0	0	0	0	0	0					
Hazard Management	0	0	0	0	0	0					
Inspection	2		1	3	1	2					
Internal Safety Audit	0		0	0	0	0					
Triennial Audit	0	-	0	0	0	0					
Other	0		0	0	0	0					
Sub Total	2	1	1	3	1	2					
Angels Flight Railway Comp	oany										
Accident Investigation	0	_	0			0 0					
Hazard Management	0		0		~	0 0					
Inspection	15		7			0 9					
Internal Safety Audit	0	-	0		-	0 0					
Triennial Audit	0		0			0 0					
Other	1	0	1			0 0					
Sub Total	16		8		9	0 9					
Getty Center Museum Autor	-				0						
Accident Investigation	0		0		-	$\begin{array}{c c} 0 & 0 \\ 0 & 0 \end{array}$					
Hazard Management	0		0			$\begin{array}{c c} 0 & 0 \\ 0 & 1 \end{array}$					
Inspection	5		2		-	$\begin{array}{c c} 0 & 1 \\ 0 & 0 \end{array}$					
Internal Safety Audit Triennial Audit	0		0 0		~	0 0 0 0					
Other	0		0		0	$\begin{array}{c c} 0 & 0 \\ 0 & 0 \end{array}$					
Sub Total	5		0								
Sub Total	<u>ر</u> ک	3	Δ		1						

Table 5: Continued - Status of Corrective Action Plans by FTA Source Category for CalendarYears 2023 and 2024

CALENDAR YEAR 2024 ANNUAL REPORT –STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

	CAPs Ger	nerated in	CY 2023	CAPs Ge	nerated in	CY 2024	
FTA Category		CAP Status			CAP Status		
	Number	Open	Closed	Number	Open Closed		
Grove Trolley							
Accident Investigation	0	0	0	3	0	3	
Hazard Management	0	0	0	0	0	0	
Inspection	10	5	5	5	0	5	
Internal Safety Audit	0	0	0	0	0	0	
Triennial Audit	0	0	0	0	0	0	
Other	0	0	0	0	0	0	
Sub Total	10	5	5	8	0	8	
Sacramento County Departme	ent of Airports						
Accident Investigation	0	0	0	0	0	0	
Hazard Management	0	0	0	0	0	0	
Inspection	2	0	2	1	0	1	
Internal Safety Audit	0	0	0	0	0	0	
Triennial Audit	0	0	0	0	0	0	
Other	0	0	0	0	0	0	
Sub Total	2	0	2	1	0	1	
San Francisco International A	irport Automa	atic Peopl	e Mover (Air]	[rain)			
Accident Investigation	0	0	0	0	0	0	
Hazard Management	0	0	0	0	0	0	
Inspection	0	0	0	3	1	2	
Internal Safety Audit	0	0	0	0	0	0	
Triennial Audit	0	0	0	0	0	0	
Other	0	0	0	0	0	0	
Sub Total	0	0	0	3	1	2	
Grand Total	558	262	296	495	126	365	

Table 5: Continued - Status of Corrective Action Plans by FTA Source Category for CalendarYears 2023 and 2024

Changes to the RTA Public Transportation Agency Safety Plans

On July 29, 2018, FTA issued 49 CFR Part 673, which requires RTAs under FTA jurisdiction to develop Public Transportation Agency Safety Plans (PTASPs), based on the principles of Safety Management Systems and comply with the following minimum requirements:

- An approval by the RTA board of directors, or an equivalent entity, and a signature from the RTA's Accountable Executive.
- Documented processes and procedures for a Safety Management System, which would include a Safety Management Policy, a process for Safety Risk Management, a process for Safety Assurance and Safety Promotion.
- Performance targets based on the safety performance measures set out in the National Public Transportation Safety Plan.
- Compliance with the National Public Transportation Safety Plan and FTA's Public Transportation Safety Program.
- A process and timeline for conducting an annual review and update of the plan.
- Emergency preparedness and response plan or procedures that address, 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 RTA's service area.

On February 17, 2022, FTA issued a "Dear Colleague Letter" informing the transit industry about the Bipartisan Infrastructure Law changes to the PTASP requirements at 49 U.S.C. § 5329(d) and establishes compliance deadlines for implementing these new provisions.

On May 13, 2024, FTA published a final rule revising 49 CFR Part 673. Notable new requirements for RTAs include but not limited to the following:

- Establishment of a Safety Committee;
- Setting safety performance targets; and
- Providing de-escalation training for frontline transit workers.

In CY 2024, CPUC staff revised the CPUC PTASP compliance checklist for reviewing the RTA's PTASP to ensure compliance with the new 49 CFR Part 673, starting in 2025.

ENFORCEMENT ACTIONS

The CPUC has two primary methods for enforcement actions. One is to open a formal proceeding before the Commission referred to as an Order Instituting Investigation (OII) and the second process allows CPUC staff to issue a citation.

If the Commission issues an OII, a formal proceeding is initiated where an Administrative Law Judge is assigned to preside over hearings and may prepare a draft Decision for Commission consideration.

The Commission issued Resolution ST-163 (12/22/2014), which approved a citation program under the administration of the CPUC's Director of the Safety and Enforcement Division (SED) for enforcing compliance with certain GOs, Codes of Federal Regulations (CFRs), and other requirements for RTAs operating in California. RTSB and two other CPUC branches involved in rail safety were formerly part of SED. In 2019 CPUC formed RSD by separating the 3 rail safety branches from SED. Therefore, the authority delegated to the SED Director in Resolution ST-163, now is delegated to the RSD Director.

RSD has delegated authority to draft and issue citations for specific violations and levy penalties in specified amounts as set forth in the Resolution. RSD works with CPUC's Legal Division to generate and issue citations. The Rail Transit Citation Program includes an appeal process.

No new OII formal proceedings and no citations under Resolution ST-163 were initiated by RTSB during calendar year 2024.

SUMMARY OF ACTIVITIES FOR ALL FTA REGULATED RAIL TRANSIT AGENCIES IN CALENDAR YEAR 2024

BAY AREA RAPID TRANSIT DISTRICT

BART is primarily a heavy rail, (rapid transit) highcapacity public transportation system serving the San Francisco Bay Area, that began revenue operations on September 11, 1972. BART is operated by the Bay Area Rapid Transit District, formed in 1957. The initial system opened in stages from 1972 to 1974. The heavy rapid



rail, electrically powered, elevated and subway system connects San Francisco and Oakland with urban and suburban areas in Alameda, Contra Costa, San Mateo and Santa Clara counties. BART serves 50 stations along seven routes on 131 miles of rapid transit lines, including a 10-mile spur line in eastern Contra Costa County which utilizes diesel powered trains and a 3.2-mile automated guideway transit line from its mainline to the Oakland International Airport.

The BART Board is comprised of nine elected officials from the 9 BART Districts who serve 4-year terms. In 2024, five of nine seats were up for election, representing: Alameda, Contra Costa, and San Francisco. Four new Directors were appointed to the BART Board of Directors as of December 6, 2024.

BART Rail System Description

The current BART system operates on the following seven lines:

- Berryessa/North San José Daly City Line
- Dublin/Pleasanton—Daly City Line
- Richmond—San Francisco Airport Line
- Pittsburg/Bay Point— San Francisco Airport Line
- Richmond—Berryessa/ North San José Line
- Pittsburg/Bay Point Antioch Line (East Contra Costa County BART extension)
- Coliseum Oakland International Airport Line (Oakland Airport Connector)

The initial segment was 28 miles of track in Alameda County, servicing Oakland to Fremont. The second segment opened on January 29, 1973, with 12 miles of track extending to Richmond. A 17-mile

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segment opened on May 21, 1973, offering service from Oakland to Concord. On November 5, 1973, a new, temporarily disconnected 7.5-mile segment opened between Montgomery Street in Downtown San Francisco and Daly City. The Transbay Tube opened on September 16, 1974, fully connecting the 71.5 miles of track of the original BART system. Embarcadero Station opened on May 27, 1976, bringing the total station count to 34.

An extension to the Concord line, continuing to the North Concord/Martinez Station, opened on December 16, 1995, adding 2.25 miles of track to the BART system. The Colma Station opened for revenue service on February 24, 1996, adding 1.6 miles of track south of the Daly City Yard. The Pittsburg/Bay Point Station opened on December 7, 1996, completing the 7.8-mile extension from Concord station which included the North Concord/Martinez Station. The Dublin/Pleasanton extension opened on May 10, 1997, adding 14 miles of track and two stations to the system. The San Francisco Airport extension opened on June 22, 2003, adding four stations and 8.7 miles of track. The Warm Springs/South Fremont extension opened on March 25, 2017, adding one station and 5.4 miles of track. Finally, Berryessa/North San José extension began service on June 13, 2020.



East Contra Costa BART Extension (e-BART)

The East Contra Costa BART Extension Project opened in 2018 and provides passenger service along 10 miles of the California State Route 4 corridor connecting east of the Pittsburg/Bay Point Station. The extension uses Diesel Multiple Unit (DMU) vehicles instead of BART's standard electrically driven trains and includes two new stations and a transfer platform to provide timed transfers between DMU vehicles and traditional BART trains. The SCP for this extension was approved by the Commission in Resolution ST-139 (3/23/2012).

BART's Oakland Airport Connector

The Oakland Airport Connector (OAC) is an APM system designed to integrate with BART at the Coliseum Station, to convey passengers to and from the Oakland International Airport. OAC began revenue operation on November 22, 2014. The system was designed and constructed by Flatiron Construction and Parson Transportation along with Doppelmayer Cable Car (DCC) that designed, manufactured, and supplied the APM system and guideway. DCC now operates and maintains the system as part of a 20-year BART operations and maintenance contract. The pinched-loop cable-driven system is 3.2 miles in length, including two passenger stations and a vehicle maintenance facility

which houses the traction motors. CPUC staff monitored the engineering design and construction phases of this project through the safety certification process approved by the Commission in Resolution ST- 64 (10/2/2003). BART established the OAC as a separate system because of its significant difference from traditional BART service.



The OAC system has not experienced any accidents or significant operational concerns since it began operations. The OAC underwent its first triennial review in October 2016.

BART Accident Summary

Accident Type	BART
Other/Train vs Train/Yard Collision (29.5%)	13
Mainline Derailment/Yard Derailment (27.3%)	12
Evacuation/Fire/Smoke (20.5%)	9
Train vs Person/Train vs Bicycle/Other Conveyance (with rider) (15.9%)	7
Train vs Trespasser (6.8%)	3
Train vs Vehicle (0%)	0
Grand Total	44

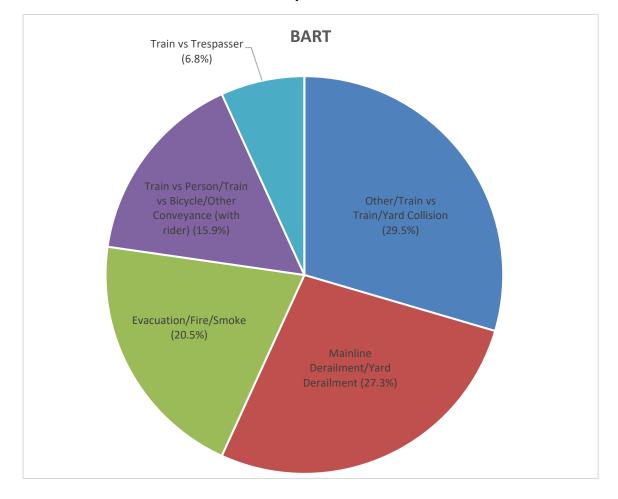


Table 6: BART Accidents Primary Causal Factors - Calendar Year 2024

Figure 4: BART Accidents Primary Causal Factors - Calendar Year 2024

NOTE: The category "Other" is comprised of all accidents not included in the other categories. These include accidents resulting in substantial damage or evacuations, and a collision with an object such as signs/poles, crossing gates, signal cabinet door, motor vehicles, shopping carts, etc. left on or next to the tracks.

Impacts from Weather Events

BART had service delays due to wet weather conditions necessitating slowdown of trains, but there were no major weather-related service impacts in 2024.

Bipartisan Infrastructure Legislation

As of December 2022, BART has formed the Safety Management System (SMS) Joint Union Management Safety Committee, meeting the requirement of the Bipartisan Infrastructure Law on the Public Transportation Agency Safety Plan. This committee will identify risk-based corrective measures needed to eliminate or control recognized safety and health hazards to transit operations and workforce, annually review and approve BART's Public Transportation Agency Safety Plan, and other work that the committee might decide.

Silicon Valley Berryessa Extension/Silicon Valley Rapid Transit Project

The Santa Clara Valley Transportation Authority (VTA) and BART are constructing a 16.3-mile extension that will extend the BART system into Santa Clara County and to the City of San Jose. The extension was planned and developed jointly by BART and VTA. VTA and its contractors are constructing the extension



in accordance with BART standards and BART will operate the rail system when completed. The planned revenue service date is now projected in 2036. The line will extend from the planned Warm Springs Station to Milpitas alongside Union Pacific Railroad Company tracks, continuing to 28th Street and Santa Clara Street in San Jose, then proceeding underground through downtown San Jose to the Diridon Caltrain Station and finally terminating at the Santa Clara Station. This project has been divided into 2 phases:

- Silicon Valley Berryessa Extension (SVBX) 10 miles in length which is currently in operation and was approved for rail service on June 13, 2020. This segment is currently operating.
- Silicon Valley Phase II Extension 6.0 miles in length which is environmentally cleared and under final design, slated for completion by 2036.

The CPUC approved BART's Safety Certification Plan (SCP) with Resolution ST-83 (2/15/2007), and CPUC staff have been monitoring and inspecting the engineering, design, and construction phases of this project through the safety certification process.

New Vehicle Procurement Project - Fleet of the Future

BART's new vehicle procurement project currently underway will replace the existing fleet of 669 legacy cars with 775 Fleet of the Future (FOTF) new cars. The manufacturer has been delivering new cars since 2018. CPUC staff have been reviewing test records prior to approval for each car during the procurement project through the safety certification process. As of November 14, 2024, CPUC staff have approved all



775 new cars from BART's original procurement contract, and BART has notified the CPUC they are exercising their optional 425 car contract, which will procure an additional 425 E-Cars. Staff has acknowledged the purchasing of additional cars and will conditionally approve the cars through the established process. As of December 31, 2024, CPUC staff have approved 80 new cars from the optional contract. BART is safety certifying the cars in accordance with the SCP, approved by the Commission in Resolution ST-150 (3/22/2013).

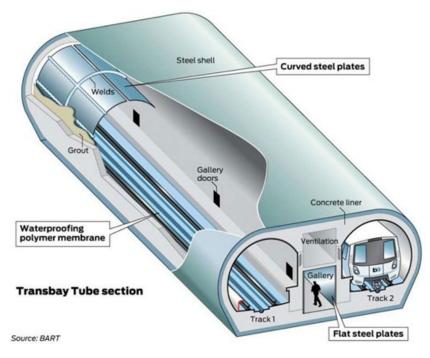
BART Communications Based Train Control Upgrade

BART is upgrading its entire mainline with a Communications-Based Train Control (CBTC) system. The CBTC technology utilizes a two-way digital radio frequency communication between intelligent trains, and a network of distributed track-side zone controllers. The primary characteristics of a CBTC

Train Control Modernization CBTC (Moving Block Signaling) (>>

system include high resolution train location determination by car borne equipment and independent of track circuits. The new CBTC system will provide shorter headways (amount of time between train arrivals at a station), lower maintenance costs, greater operational flexibility, enhanced safety (due to reduced maintenance and more precise tracking of trains and maintenance vehicles), smoother and more predictable operation, and improved reliability and availability. BART awarded the contract to Hitachi to design and build the project, with Notice to Proceed executed in November 2020. The SCP

was approved by the Commission in Resolution ST-206 (10/30/2017). The Project is entering the final design phase for deploying CBTC Automatic Train Supervision (ATS) over the entire network, which is the initial stage of many phases for the project. The project has installed CBTC wayside equipment at the Hayward Test Track and will begin installation of CBTC wayside equipment between Millbrae Station and San Francisco Internation Airport Station in 2025.



BART Transbay Tube Seismic Retrofit Project

This project is a part of the Earthquake Safety Program approved by the Commission in Resolution ST-81 (10/27/2005). The program is to retrofit the 1976 Transbay Tube. In 2005, the project began to retrofit elements including aerial structures, underground structures, and stations that may be vulnerable to a major earthquake. All elements have been completed with the exception of the 3.6-mile-long Transbay Tube connecting the cities of Oakland and San Francisco that started the retrofitting construction in 2019.

The Transbay Tube retrofit project will upgrade and strengthen the infrastructure by reinforcing the tube itself. The project was completed in 2023 with an estimated cost of \$267 million. BART submitted the final Safety Certification Verification Report (SCVR) to the CPUC on March 22, 2024. CPUC staff reviewed the final documentation and performed final inspections of the project, and CPUC Rail Safety Division Director approved of the SCVR on April 8, 2024.

Hayward Maintenance Complex (HMC)

BART's new project to expand and improve its Hayward maintenance and storage yard, approved by Commission Resolution ST-218 (4/16/2019), is partially complete. BART's Hayward Yard is one of four BART maintenance facilities serving the BART system. Over the next 30 years BART will acquire

additional vehicles to meet future demand associated with the regional population growth, system expansion of the Warm Springs and Silicon Valley/San Jose Extension projects, additional riders from the Oakland Airport Connector, and the e-BART projects. Accordingly, BART requires expanded maintenance and storage facilities to serve the expanded fleet. The project will add storage tracks for up to 250 rail cars, expand maintenance facilities, construct a flyover bridge structure to move



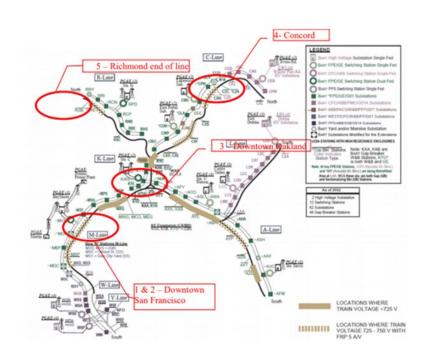
cars south out of the complex, and an equipment/personnel overcrossing to allow movements between the existing complex and a new storage yard.

On July 8, 2022, BART submitted the Safety Certification Verification Report (SCVR) to conclude the HMC Phase I project. The SCVR was approved on October 6, 2022, by CPUC staff after review of project documentation, field inspection, and satisfactory resolution to safety findings.

HMC Phase II is currently undergoing preliminary design and engineering.

BART Traction Power System Improvements Project:

To support the traction power system due to BART's capacity expansion, five sites have been identified for installation of new traction power substations. The project is split into the West Bay and East Bay sites. The two West Bay sites are Civic Center Station and Montgomery Street Station. Civic Center Station construction is complete and is undergoing final testing and training for BART staff and Mongomery Station construction is ongoing



BART Traction Power System Improvement Project

with completion anticipated in Summer 2025. The three East Bay sites are in the cities of Oakland,

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Concord, and Richmond, with completion dates to be determined. An SCP was approved via Commission Resolution ST-239 (July 20, 2020). East Bay sites completed the engineering design phase and construction bids are expected by Spring of 2025.

BART Irvington Station Project:

The Irvington Station Project includes construction of a new station halfway between the existing Fremont and Warm Springs / South Fremont stations. The estimated completion year is 2029. The project is in the engineering design phase. The SCP was approved by Commission Resolution ST-240 (November 5, 2020).



LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is the transportation agency for Los Angeles County. LACMTA is governed by a 13-member Board of Directors comprised of five Los Angeles County Supervisors, the Mayor of the City of Los Angeles, three Los Angeles mayor-appointed members, four city council members representing the other 87 cities in Los Angeles County,



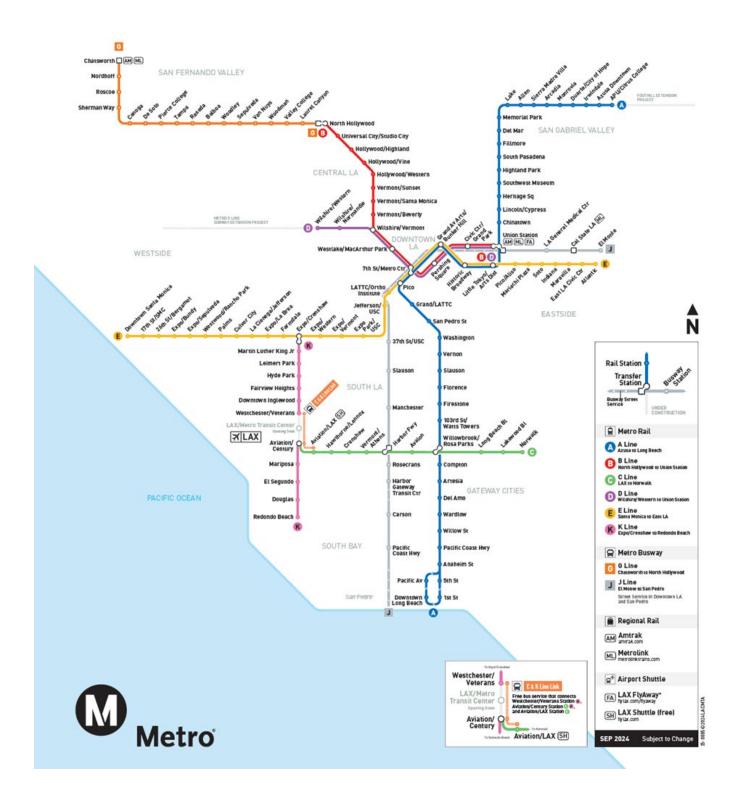
and one non-voting member appointed by the Governor of California. The Twenty-Eight by '28 initiative set forth by the City of Los Angeles Mayor and the LACMTA Board of Directors proposes for the completion of 28 LACMTA transportation infrastructure projects before the start of the 2028 Summer Olympic and Paralympic Games, many of which are rail transit projects.

RTSB plans to conduct a triennial audit of LACMTA in 2025.

LACMTA Rail System Description

The LACMTA rail system consists of A, B, C, D, E, and K Lines. The Regional Connector project opened to the public on June 16, 2023, and led to major route/line changes by connecting the former L line to the A Line and the E Line. The former L line (rail segment between downtown Los Angeles to Azusa) is now operated as part of the A Line. The former L Line (rail segment between downtown Los Angeles to East Los Angeles) is now operated as part of the E Line.

The K Line opened for revenue service in October 2022. The K Line project connected new tracks to the existing C Line and on November 2024 the C and K Lines were reconfigured. The K Line operated between Aviation/Century Station and Redondo Beach Station while the C Line operated between Aviation/Century Station and Norwalk Station. The C Line now operates between Norwalk Station and the recently opened Aviation/Century Station. The remaining K Line segment, including LAX/Metro Transit Center, is anticipated to open in early 2025. Once in final operation, the K Line will operate between Expo/Crenshaw Station and Redondo Beach in a north-south alignment, and the C Line will operate between LAX/Metro Transit Center and Norwalk in a west-east alignment.



LACMTA Rail System Map

A Line (Formerly known as Blue Line)

Due to the completion of the Regional Connector Project in 2023, the A Line now includes a segment of the former L Line (between downtown Los Angeles to Azusa). The A line is now a light rail line that runs from Long Beach to Pasadena and Azusa through downtown Los Angeles and serves 44 stations over a 48.5-mile route. This is currently the longest rail transit line in the country. The A Line connects to the C Line at Rosa Parks/Willowbrook Station in Compton and to the B/D Lines at the 7th/Metro Station in downtown Los Angeles. The Foothill Extension Project Phase 2B currently under construction will further extend the A line from the City of Azusa to the City of Pomona.

B Line (Formerly known as Red Line)

The B Line is a heavy rail subway line that has been operating since 1990. LACMTA operates four-car and six-car trains on this 17.4-mile route between the Los Angeles Union Station and North Hollywood with 16 stations. The B Line connects to the A Line and the E Line at the 7th/Metro Station and connects to Amtrak, Metrolink commuter rail, and the A Line again at the Los Angeles Union Station.



C Line (Formerly known as Green Line)

The C Line is a light rail transit line that currently runs east-west along the median of the Glenn Anderson (a.k.a. Century) Freeway (Interstate 105) through Los Angeles County between the City of Norwalk and the newly constructed Aviation/Century Station. The C Line will make stops at the LAX/Metro Transit Center when construction of the station is completed. Until November 2024 the stations of Mariposa, El Segunda, Douglas, and Redondo Beach had been part of the C Line but are now part of the K Line. LACMTA operates a two-car configuration on the line with the exception of one-car trains during low service use period. The C Line has been operating since 1995 and will have 12 stations in its final configuration, sharing the Aviation/Century Station and LAX/Metro Transit Center with K Line over its 17.8-mile route. The C Line also connects to the A Line at the Imperial/Wilmington (Rosa Parks) Station in the City of Compton.

D Line (Formerly known as Purple Line)

The D Line is a heavy rail subway line that runs between Los Angeles Union Station and the Koreatown area of the City of Los Angeles and diverges from the B Line at the Vermont-Wilshire Station with two additional stations. The D Line construction expansion will eventually provide the connection to the three phases of the D Line capital project extensions currently in construction.

L Line (Formerly known as Gold Line)

The former Gold Line, operating since July 2003 from Los Angeles Union Station to the City of Pasadena Sierra Madre Villa Station, is now operated as part of the A Line and the E Line due to the completion of the Regional Connector Project in 2023 which created direct track connections amongst the existing A, E, and L Lines.

E Line (Formerly known as Mid-City Expo Line)

The Mid-City Expo Line Phase I project opened in April 2012 as an 8.5-mile double track light rail system with 12 stations between downtown Los Angeles to Culver City. This initial portion of the E Line serves the University of Southern California, Exposition Park, the Mid-City communities, the Crenshaw District, and Culver City.

The Expo Line Phase II project opened in May 2016. This portion of the line is a 6.6-mile double track extension of the Expo Mid-City Expo Phase I Line. The existing 8.5-mile system from downtown Los Angeles to Culver City was extended westbound to the City of Santa Monica. This project added 7 new stations and travels along the old Pacific Electric Exposition right-of-way to 4th Street and Colorado Ave in downtown Santa Monica.

Due to the completion of the Regional Connector Project in 2023, the E Line now includes the former L Line (downtown Los Angeles to East Los Angeles Portion) as part of the E Line. The current E Line includes Phase I and Phase II of the Expo Project along with the Eastside Extension Project of the former L Line. The E Line currently runs from downtown Santa Monica Station to the East Los Angeles Atlantic Station and serves a total of 29 Stations over 22 miles. The E Line and A Line share 5 stations in the Los Angeles downtown region.



K Line (Formerly known as Crenshaw/LAX Line)

LAX/Metro Transit center is complete, the K line will share this station with the future LAX Automated People Mover and the C Line. Currently the K Line operates from Expo/Crenshaw station to Redondo Beach Station with a bus bridge between Westchester/Veterans Station and Aviation/Century Station. Up until November 2024 Mariposa, El Segundo, Douglas, and Redondo Beach Stations were part of the C Line. The K Line project connected track to the C Line and these stations are now considered part of the K Line. Once in final operation, the K Line will operate between Expo/Crenshaw Station and Redondo Beach in a north-south alignment, and the C Line will operate between LAX/Metro Transit Center and Norwalk in a west-east alignment. In its final configuration, the K Line will have 13 stations, sharing the Aviation/Century Station and LAX/Metro Transit Center with C Line.

LACMTA Accident Summary

Accident Type	LACMTA
Train vs Vehicle (57.5%)	42
Train vs Person/Train vs Bicycle/Other Conveyance (with rider) (19.2%)	14
Other/Train vs Train/Yard Collision (15.1%)	11
Train vs Trespasser (5.5%)	4
Mainline Derailment/Yard Derailment (2.7%)	2
Evacuation/Fire/Smoke (0%)	0
Grand Total	73

Table 7: LACMTA Accidents Primary Causal Factors - Calendar Year 2024

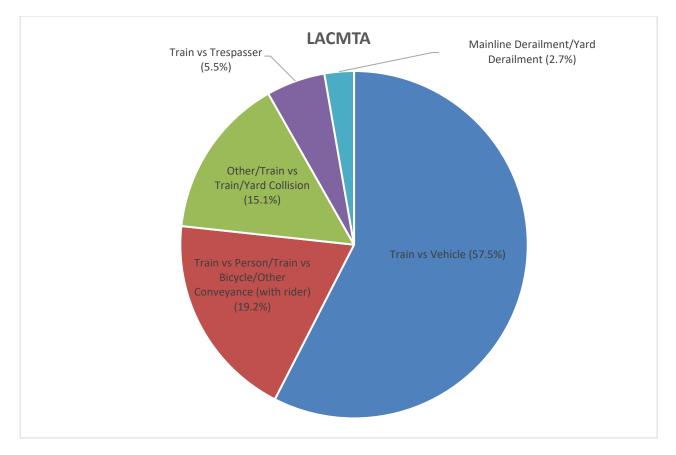


Figure 5: LACMTA Accidents Primary Causal Factors - Calendar Year 2024

NOTE: The category "Other" is comprised of all accidents not included in the other categories. These include accidents resulting in substantial damage or evacuations, and a collision with an object such as signs/poles, crossing gates, signal cabinet door, motor vehicles, shopping carts, etc. left on or next to the tracks.

System Expansions and Capital Projects



LACMTA is in the process of procuring as many as 235 new rail vehicles. These vehicles are intended to expand passenger capacity for the recently completed projects (Expo Phase 2 and Foothill Extension Phase 2) and the future LAX/Crenshaw line currently under construction. The SCP was approved by Resolution ST-149

(1/10/2013). On January 7, 2021, LACMTA received the final rail car of the order at the new maintenance yard for the Crenshaw/LAX Transit Project. This shipment completed the P3010 Light Rail Vehicle (LRV) fleet, the largest rail fleet at LACMTA. As rail cars are prepared for service, CPUC staff will approve them after reviewing the Car History Books (testing documentation). On March 4, 2016, CPUC staff gave LACMTA personnel approval to place the first five cars in service.

CPUC staff sent the final approval letter for the last 2 cars on May 11, 2023. On January 12, 2024, CPUC met with LACMTA to discuss what LACMTA is still tracking internally as well as to discuss the final SCVR package to be submitted to CPUC to close out the project. LACMTA has not yet submitted the final SCVR documentation for CPUC approval.

P3010 New Vehicle Procurement Project

HR4000 Heavy Rail Vehicle Procurement

LACMTA is in the process of procuring a base order of 64, with options for up to 282, new heavy rail vehicles to provide for the future expansions of its Regional Connector and D Line (formerly known as Purple Line) Extensions, and to replace the aging heavy rail vehicle fleet operating on the B and D Lines (Red/Purple Line) subways. Resolution ST-185 (10/25/2018) approved the procurement option. The vehicle manufacturer is China Railway Rolling Stock Corporation (CRRC). The first HR4000 married pair arrived on site in Los Angeles in July 2023 and the second one arrived in December 2023. LACMTA continues to monitor manufacturing progress at both the Springfield, Massachusetts assembly site and Changchun, China manufacturing site.



Image of HR4000 Heavy Rail Vehicle

As of December 4, 2024, there are sixteen vehicles in the Los Angeles site, six of which are pilot vehicles. The project team is conducting vehicle level qualification testing.

On December 10, 2024, CPUC and project staff held a meeting discussing remaining open items for the SCVR. After the SCVR was resubmitted on December 12, 2024, with CPUC comments addressed, Staff sent an SCVR approval letter on December 13, 2024, allowing LACMTA to place the 3 rail cars into revenue service.



Regional Connector Transit Corridor (RCTC) Project

and E lines that previously required a transfer from the B or D lines. The SCVR was approved by

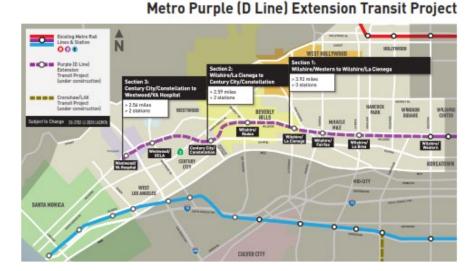
CALENDAR YEAR 2024 ANNUAL REPORT -STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

CPUC on 5/26/2023, and LACMTA addressed the remaining concerns satisfactorily prior to opening. The project provides a direct connection between the cities of Azusa and Long Beach, and between East Los Angeles and Santa Monica, and in general allows LACMTA to have much greater flexibility with regard to route options within LA County.

The SCVR was approved by CPUC on May 26, 2023. One of the open items that required monitoring was a cavern plenum slab adjacent to Historic Broadway Station that was showing unintended deflection during project construction. The project rectified the issue with a support system and monitored it by taking monthly measurements from May 16, 2023, to May 9, 2024, to verify that the support system prevented movement as intended. RTSB staff also requested that LACMTA develop a Standard Operating Procedure (SOP) for continuing inspections of the cavern plenum slab annually and after seismic events. Staff are tracking the creation of the SOP as a project open item.

D Line (Westside) Extension Project

The D Line (formerly known as the Purple Line) Westside Extension project will extend subway service from the current terminus at the Wilshire/Western Station to Westwood (UCLA and the Veteran's Administration Hospital). This extension will consist of nearly nine miles of heavy rail subway with seven stations and is separated into 3 different



projects/segments (PLE1, PLE2, PLE3). The design build contractor for Segment 1 is STS (a joint venture of Skanska, Traylor, Shea). The design build contractor for Segment 2 is TPOG (a joint venture of Tutor Perini and O&G). Tutor Perini is also the design build contractor for Segment 3 tunneling and stations.

The planned revenue service years for Purple Line Segments 1, 2, and 3 are 2025, 2026, and 2027, respectively. As of December 2024, construction progress for PLE1 is at 95%, PLE2 is at 75%, and PLE3 is at 57%. CPUC staff are working with the project contractors/management and LACMTA's safety department to ensure design, construction, and testing conformance of safety related requirements through the participation at the Safety Certification Review Committee meetings and Fire Life Safety Committee meetings.

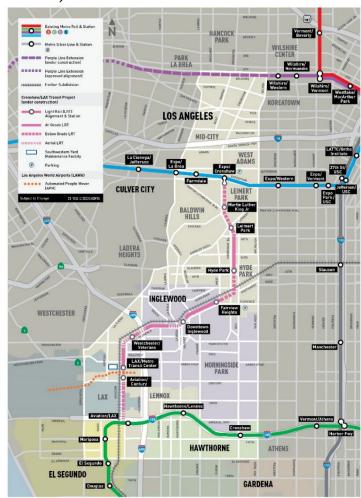
A Line (Formerly L Line) Foothill Extension Phase 2B

The Foothill Phase 2B light rail transit project extends the L Line (Gold Line) from the current terminus of Azusa Station to the City of Pomona (in Los Angeles County), with a contract option for the design build contractor (Kiewit-Parsons) to build to the City of Montclair (in San Bernardino County). Major construction commenced in July 2020, beginning with track and warning equipment installation at the rail crossings. CPUC staff have been meeting with the project teams, LACMTA, and the Foothill Construction Authority to audit/verify design conformance and field verify construction and testing conformance of safety related requirements. The SCP was approved by the CPUC in Resolution ST-194 (1/19/2017). The opening of this project for revenue operations is currently scheduled to take place in Summer 2025.

K Line (Formerly known as Crenshaw/LAX Line)

LACMTA is constructing a new light rail line from the existing E Line (formerly known as Expo Line) Crenshaw Station to the existing C Line (formerly known as Green Line) Aviation/LAX Station. An additional at-grade station is included in the project at 96th Street and Aviation, which will later be known as the LAX/Metro Transit Center but is currently called the Airport Metro Connector (AMC), and it will connect to the future LAWA APM system at Los Angeles International Airport (LAX) currently under construction. The K line will travel 8.5 miles and will serve the Cities of Los Angeles, Inglewood, El Segundo, and portions of unincorporated Los Angeles County. The SCP was approved by the CPUC in Resolution ST-143 (10/3/2014).

The AMC station is under construction in the southern segment of the alignment. The future LAX APM will connect to this



station. To avoid the construction zone but allow revenue service, K Line opened to the public on October 7, 2022, from the Expo/Crenshaw Station to Westchester/Veterans station, with a turnback operation north of the construction zone. The SCVR for the first phase of opening was approved by CPUC on September 28, 2022, and remaining concerns were addressed satisfactorily prior to opening. On November 3, 2024, the Aviation/Century Station opened to the public, and the following K Line and C Line operational changes were implemented: the K Line operated between Aviation/Century

Station and Redondo Beach Station while the C Line operated between Aviation/Century Station and Norwalk Station.

East San Fernando Valley Project

The East San Fernando Valley project alignment will start at the Van Nuys Bus Rapid Transit Orange line station (in City of Los Angeles) and head north for 6.7 miles through the San Fernando Valley, adding 11 new stations, with 34 trains serving this alignment. It will be a street running system for the most part with approximately 3 miles on a shared corridor with Metrolink/Amtrak commuter trains. The forecasted revenue service date is June 2028. In February 2023, LACMTA awarded the PDB contract to the San Fernando Transit Constructors Joint Venture (SFTCJV) made up of SKANSKA, Stacy and Witbeck, and AECOM.

Southeast Gateway Line (Previously West Santa Ana Branch Transit Corridor Project)

LACMTA is evaluating a new light rail transit line that will connect southeast Los Angeles County to downtown Los Angeles, serving the cities and communities of Artesia, Cerritos, Bellflower, Paramount, Downey, South Gate, Cudahy, Bell, Huntington Park, Vernon, unincorporated Florence-Graham community, and downtown Los Angeles. The Southeast Gateway Line is a 19-mile corridor project. On January 27, 2022, the LACMTA Board of Directors approved Los Angeles Union Station as the northern terminus of the Southeast Gateway Line Project. The 14.8-mile Slauson/A Line to Pioneer route was also approved as the Locally Preferred Alternative (LPA) for the project's initial segment between Artesia and downtown Los Angeles. The project's groundbreaking took place in October 2024, with operation of the new line expected in 2035.

NORTH [SAN DIEGO] COUNTY TRANSIT DISTRICT

San Diego's North County Transit District (NCTD) was created by Senate Bill 802 in 1975 and started operations as North County Transit District on July 1, 1976. The NCTD Board of Directors is made up of one representative from each incorporated city served by NCTD, plus the County Supervisor representing the County's Fifth District which



covers unincorporated areas of north San Diego County and a non-voting member from City of San Diego. The NCTD is responsible for planning, developing, and implementing a fixed route system

throughout North San Diego County. NCTD's service area extends from the San Diego County-Orange County border at the northern end to the southern limits of the City of Del Mar and from the western coast of the City of Oceanside to the City of Ramona at the eastern end.

The NCTD is responsible for maintaining the San Diego rail subdivision, purchased in 1994, which extends from the San Diego County-Orange County border south to downtown San Diego and serves commuter, intercity, and freight rail service.

The NCTD is also responsible for maintaining the Escondido subdivision which extends from City of Oceanside to City of Escondido for SPRINTER hybrid⁴ rail and freight rail service. Only the Escondido subdivision hosting SPRINTER service is jurisdictional to the rail transit safety regulations and are included in this SSOA Annual Report.

NCTD Rail System Description

The NCTD SPRINTER system operates over 22.3 miles, from the City of Oceanside to the City of Escondido, partially double-tracked, with 15 stations. NCTD's SPRINTER line is classified as hybrid rail on semi-exclusive right-of-way⁵. There is a shared corridor with Amtrak and COASTER commuter trains beginning at the Oceanside Transit Center and ending less than a quarter mile South of the Oceanside Boulevard grade crossing, where SPRINTER tracks turn east toward City of Escondido. In addition to the shared corridor, most of NCTD track on the SPRINTER line is jointly used by rail transit and freight operations under a temporal separation⁶. The BNSF Railway operates freight service that shares track with NCTD on the SPRINTER line. BNSF Railway operates during the late-night hours outside of NCTD SPRINTER revenue service hours, under a Federal Railroad Administration (FRA) waiver. The FRA approved NCTD's standard operating procedures that ensure rail transit and freight service remain temporally separated.

The SPRINTER system began revenue service on March 9, 2008. The Escondido Transit Center Station and Vista Transit Center Station are the main transfer stations for rail transit/bus connections, and the Oceanside Transit Center Station provides service connections to Amtrak, NCTD COASTER commuter train, and the NCTD BREEZE bus system. The SPRINTER operates through five

⁴ Hybrid Rail means rail system primarily operating routes on the national system of railroads, but not operating with the characteristics of commuter rail. This service typically operates light rail-type vehicles as diesel multiple-unit trains (DMU's). These trains do not meet Federal Railroad Administration standards, and so must operate with temporal (time of operation) separation from freight rail traffic.

⁵ A semi-exclusive alignment is in a separate right-of-way or along a street or railroad right-of-way where motor vehicles, pedestrians, and bicycles have limited access and cross only at designated locations, such as rail crossings.

⁶ Temporal separation exists when no simultaneous operation of light rail transit and freight trains on the same track occurs.

jurisdictions including the Cities of Oceanside, San Marcos, Vista and Escondido, as well as unincorporated San Diego County.





NCTD Accident Summary

Accident Type	NCTD
Train vs Person/Train vs Bicycle/Other Conveyance (with rider) (50%)	2
Evacuation/Fire/Smoke (25%)	1
Train vs Trespasser (25%)	1
Other/Train vs Train/Yard Collision (0%)	0
Train vs Vehicle (0%)	0
Mainline Derailment/Yard Derailment (0%)	0
Grand Total	4

Table 8: NCTD Accidents Primary Causal Factors - Calendar Year 2024

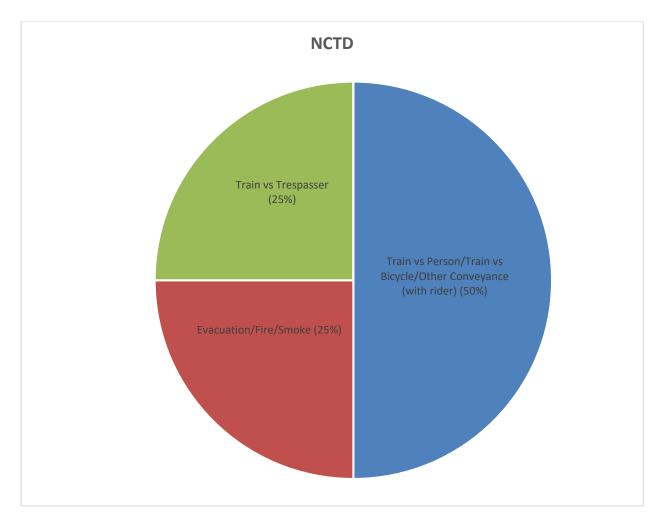


Figure 6: NCTD Accidents Primary Causal Factors - Calendar Year 2024

NOTE: The category "Other" is comprised of all accidents not included in the other categories. These include accidents resulting in substantial damage or evacuations, and a collision with an object such as signs/poles, crossing gates, signal cabinet door, motor vehicles, shopping carts, etc. left on or next to the tracks.

ORANGE COUNTY TRANSPORTATION AUTHORITY

The OCTA has received a full-funding grant agreement from the FTA and is constructing a streetcar system consisting of 4.15 miles of track between the Santa Ana Regional Transportation Center in the City of Santa Ana and the Harbor Boulevard/Westminster Avenue intersection in the City of Garden Grove. The system will be a completely new rail transit streetcar system, with OCTA becoming a new jurisdictional rail transit agency to the CPUC and will be known as the OC Streetcar. The OCTA Board of Directors is comprised of seventeen members (mostly elected officials), and the Caltrans District 12 Director serving as the 18th member in an ex-officio capacity. The



Image of OC Streetcar

CPUC has approved the system SCP for the project in Commission Resolution ST-191 (4/27/2017). The system is planned for revenue service in 2026.

The trackway includes both operations along semi-exclusive right-of-way⁷, in the old Pacific Electric (PE) railway right-of-way, and street-running operations, along Santa Ana Boulevard and 4th Street in the City of Santa Ana. Bi-directional operations occur over a new bridge north of the existing PE Santa Ana River Bridge. The Project includes 10 stations in the eastbound direction and 10 stations in the westbound direction. A new operation and maintenance facility will be bordered by 5th Street to the north, the PE Right-of-Way to the south, approximately 500 feet west of Raitt Street to the east, and approximately 1,000 feet west of Raitt Street to the west, in the City of Santa Ana.

The system is not yet operating, and current project construction activities include overhead catenary system installation, maintenance facility construction, and station construction.

⁷ A semi-exclusive alignment is in a separate right-of-way or along a street or railroad right-of-way where motor vehicles, pedestrians, and bicycles have limited access and cross only at designated locations, such as rail crossings.

Construction is approximately 92% complete. Light Rail Vehicle (LRV) procurement has begun, with all eight LRVs inspected and in storage at Siemens. LRV delivery will begin once the maintenance facility construction has progressed enough to receive the LRVs, with the current target date being March 2025.



OC Streetcar Future System Map

SACRAMENTO REGIONAL TRANSIT DISTRICT

SacRT is governed by an 11-member Board of Directors. The Board is comprised of members of the Sacramento, Rancho Cordova, Citrus Heights, Elk Grove, and Folsom City Councils, as well as the Sacramento County Board of Supervisors.

SacRT Rail System Description

SacRT light rail system currently operates over approximately 43 miles, covering a 422 square-mile service area with 54 stations. SacRT began operations in 1973 with the acquisition of the Sacramento Transit Authority. Over the next decade, SacRT continued to expand its bus service while city, county and state government officials worked together to develop a light rail system. In 1987, the 18.3-mile light rail system opened, linking the northeast (Interstate 80) and eastern (Highway 50) corridors with downtown Sacramento. In 1998, SacRT began expanding its light rail system to further meet the transportation needs of the Sacramento area. Since then, several light rail expansion projects have been completed.

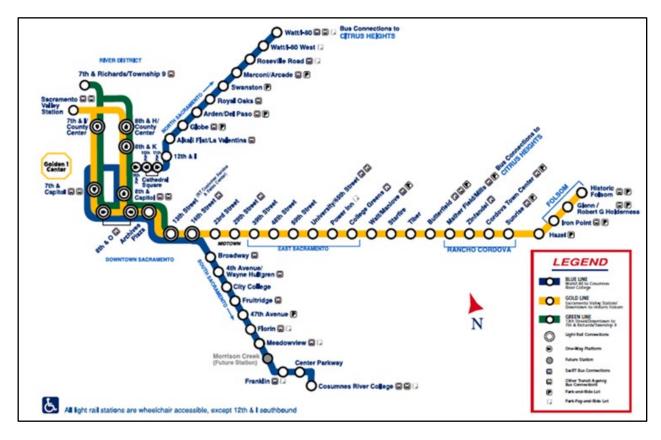


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The Gold Line runs from the Historic Folsom Station in downtown Folsom to the Sacramento Valley station at the Amtrak Station in downtown Sacramento. The Blue Line runs from the Watt/I-80 station in the northeast corridor to the Cosumnes River College to the south. In 2012, SacRT completed the Green Line, a one-mile extension from downtown Sacramento to Richards Boulevard. This line includes 2 stations, running a 30-minute headway service from the Township 9 station on Richards Boulevard to the existing 13th Street station.

SacRT has an existing approved FRA waiver of compliance in Docket Number FRA-2006-24216 relating to shared limited connections in two separate corridors with Union Pacific Railroad. On March 25, 2024, and April 26, 2024, SacRT requested FRA to extend the waiver. On September 27, 2024, FRA granted the waiver for an additional 5 years to September 27, 2029.



Sacramento Regional Transit District System Map

SacRT Accident Summary

Accident Type	SacRT
Train vs Vehicle (70.6%)	24
Train vs Person/Train vs Bicycle/Other Conveyance (with rider)	6
(17.6%)	
Other/Train vs Train/Yard Collision (5.9%)	2
Mainline Derailment/Yard Derailment (5.9%)	2
Evacuation/Fire/Smoke (0%)	0
Train vs Trespasser	0
Grand Total	34



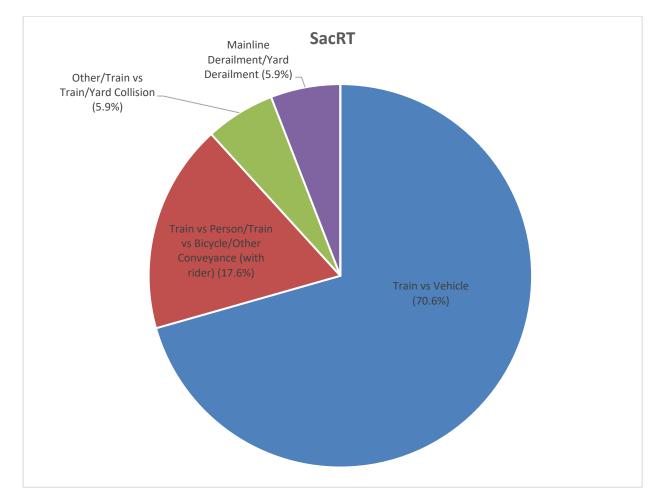


Figure 8: SacRT Accidents Primary Causal Factors - Calendar Year 2024

NOTE: The category "Other" is comprised of all accidents not included in the other categories. These include accidents resulting in substantial damage or evacuations, and a collision with an object such as signs/poles, crossing gates, signal cabinet door, motor vehicles, shopping carts, etc. left on or next to the tracks.

System Expansions and Capital Projects

LRV (Light Rail Vehicle) Procurement Project:

SacRT has secured funding for 44 new Siemens Transportation Group S700 LRVs. The SCP was approved by Resolution ST-251 (12/15/2023). The first 9 vehicles were accepted for service on September 1st, 2024. Since that date, an additional 10 LRVs have been accepted for service. Delivery and acceptance of the remaining vehicles is ongoing.

Light Rail Station Addition - Dos Rios Station:

Throughout 2024 progress was delayed due to ongoing environmental remediation of the site and the need to secure sources of funding. Full funding for the project has now been secured and initial work at the site has begun.

Light Rail Station Addition - Railyards Station

The City of Sacramento has secured funding for the Railyards Station project and the crossing design is under evaluation. The project will construct a station for one direction of travel. The project will also realign approximately 0.8 mile of track, permitting development of the area. The project is managed by the City of Sacramento, with SacRT providing design consulting and acceptance.

Gold Line Low-Floor Vehicle Station Modification Project:

SacRT completed Gold Line low-floor vehicle platform modifications in December 2024. Existing Gold Line station platforms have been raised to accommodate a two-car consist of the S700 Low-Floor LRVs; and maintain sufficient existing platform and Elderly and Handicapped (E&H) ramps to accommodate the legacy LRV fleet.

Sacramento Streetcar Project:

In 2015 the cities of Sacramento and West Sacramento partnered to propose a streetcar system linking the two cities and connecting to SacRT rail system in downtown Sacramento. However, after environmental clearance was completed in 2017, in late 2018 when bids were sought for the proposed system, limited bids were received which came in significantly higher than estimated. In order to maintain project viability, the project has been reduced in scope and the plan is that a revised project is being transferred to SacRT from the Cities of West Sacramento and Sacramento, the original grant applicants. SacRT is now the lead agency and the project will be an expansion of SacRT's existing light rail system that will still link the two cities over the Sacramento River. The design is in the final stages of engineering.

SAN DIEGO TROLLEY, INC.

The California legislature created the Metropolitan Transit Development Board (MTDB) in 1975 by Senate Bill 101, empowering the board to design, engineer, and build fixed guideway facilities within

San Diego County. The MTDB established the San Diego Trolley, Inc. (SDTI) in August 1980 as a wholly owned subsidiary responsible for operation and maintenance of the LRT system. In 2005, MTDB changed its name to the Metropolitan Transit System (MTS). Its board of directors has 15 members selected as follows: four appointed from the City of San Diego (the Mayor of San Diego and 3 San Diego City Council members); two appointed from the City of Chula Vista (the Mayor of Chula Vista and a Chula Vista City Council Member); and one appointed from each city council of Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway and Santee; and one appointed from the San Diego County Board of Supervisors.

The area of jurisdiction is about 570 square miles serving a population of 3 million, approximately 75% of southwestern San Diego County. The SDTI LRT system operates over 53.5 miles on three routes, mostly double-tracked, with 53 stations.

SDTI's rail lines are classified as light rail on semi-exclusive right-ofway. There is a shared corridor with BNSF Railway, Amtrak, and Coaster trains through downtown San Diego. In addition to the shared



San Diego Trolley Light Rail Vehicle in Downtown San Diego

corridor, portions of SDTI track on the Blue and Orange Lines are jointly used by LRT and freight operations under temporal separation with limited night-time joint operations. The San Diego and Imperial Valley Railroad (SDIV), a subsidiary short line railroad owned by Rail America Corporation, shares track with SDTI on the Blue line from the Imperial Transfer Station to the International Border. SDTI and SDIV share track on the Orange Line from Commercial Street at the Imperial Junction to Bradley Avenue in El Cajon, California. SDIV operates freight trains during the early morning hours with a fringe period of overlap with SDTI LRT operations under an FRA waiver. FRA approved SDTI standard operating procedures to ensure during this overlap mode of operation the LRVs remain spatially and temporally separated.

RTSB conducted a triennial audit of SDTI in September 2024. RTSB staff are working on the audit reports.

SDTI Rail System

Blue Line - Revenue service began on July 26, 1981. The Blue Line extends 30 miles from the San Ysidro Station at the Mexican Border to University Town Center. Of the total 30 miles, 1.4 miles (C Street & India to 12th & Imperial) are operated on city streets, and 14 miles (12th & Imperial to San Ysidro) are operated on semi-exclusive right-of-way. The Blue Line is comprised of 32 stations, sharing six stations with the Orange and Silver Lines downtown and five stations with the Green Line. The Blue Line operates through four jurisdictions in the Cities of San Diego, National City, Chula Vista, and an unincorporated area of San Diego County.

Orange Line – Revenue service on the first phase, from Imperial Transfer to the Euclid Avenue station, began on March 23, 1986. The line was extended in 1989 to El Cajon, and to Santee in 1995. The Orange Line currently extends 16.9 miles from the Santa Fe Depot station (via the downtown San Diego C Street corridor) to the El Cajon Transit Center station. Of the 16.9 miles, 1.7 miles of track are operated on city streets (C Street & India to 32nd & Commercial). The line continues east for an additional 14.6 miles on semi-exclusive right-of-way from 32nd and Commercial to Arnele Avenue. The Orange Line is comprised of 19 stations, sharing five stations with the Blue and Silver Lines downtown and five stations with the Green Line (one in downtown and four in East County). The Orange Line operates through four jurisdictions in the Cities of San Diego, Lemon Grove, La Mesa and El Cajon.

Green Line - Revenue service began on July 10, 2005. The Green Line begins at the Imperial Transfer Station and extends 23.8 miles from the 12th & Imperial Station along the Bayside to Old Town Transit Center through Mission Valley to Santee Town Center, including a 0.7-mile subway tunnel, under San Diego State University (SDSU). The Green Line is comprised of 27 stations, sharing five stations with the Orange Line (two in downtown and three in East County), one station with the Blue Line downtown, and four stations with the Silver Line downtown. The Green Line operates through four jurisdictions in the Cities of San Diego, La Mesa, and El Cajon.

Silver Line – Revenue service on the Silver Line began in August 2011. The Silverline is a 2.7-mile loop in downtown San Diego along Harbor Drive, on C Street, and Park Blvd, completes its loop at the 12th & Imperial, and is host to restored 1940's era Presidential Conference Committee (PCC) streetcars. The Silver Line is comprised of nine stations, sharing six with both the Blue and Orange Lines, and three with the Green Line.

Copper Line – Revenue service on the Copper Line began late September 2024. The Copper Line is a 3.8-mile line between the current El Cajon Transit Center (ETC) Station to the Santee Town Center is comprised of three stations. The beginning of the Copper Line is the shared platform at ETC Station. The Orange Line terminus is now at ETC and was previously at Petree Station. The Green Line terminus is at ETC also and was previously at the Santee Town Center Station. Passengers from the Green Line and Orange Line must transfer at ETC for further service to Santee. This line was created to save travel times (increase headways) on the Green Line and Orange Line.

Impacts from Weather Events

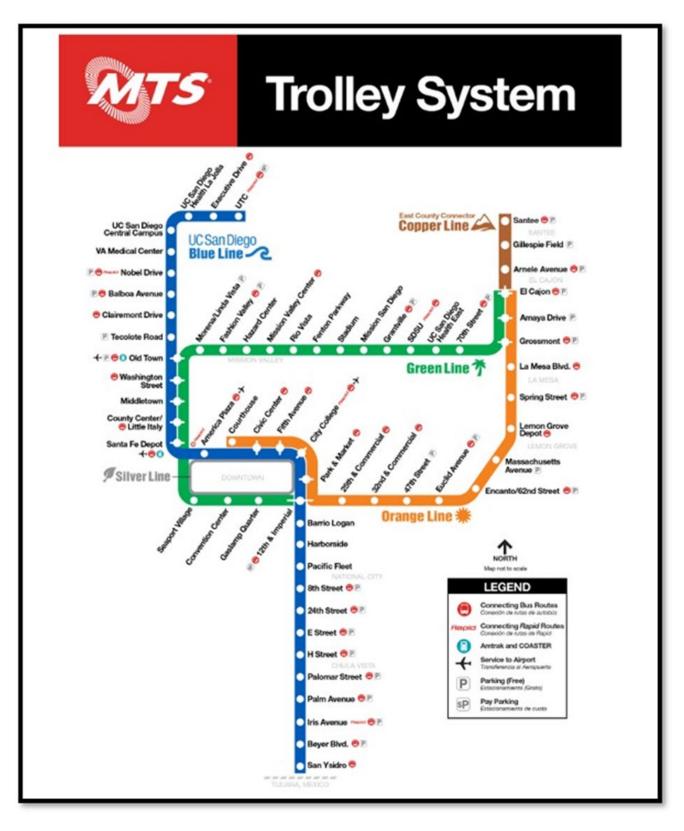
On January 22, 2024, heavy rain resulted in flooding of the Orange Line right-of-way between 62nd Street to 65th Street and the Maintenance Facilities Yard. SDTI's Maintenance Facilities experienced damage to floor level offices, seven LRVs had component damage, and loss of two-wheel truing machines. The Orange Line experienced loss of wayside signal equipment at 65th Street rail crossing and shifting

of westbound track due to loss



SDTI Post Flood Inspection, Massachusetts Avenue Station

of drainage ditch support wall adjacent to rail crossing. As a result, a "slow order" (train speed reduction) was issued for operations between Euclid Avenue and 69th Street. RTSB inspectors surveyed the damage on January 23, 2024, and inspected the rail crossing, witnessed signal system dynamic tests, and verified compliance CPUC and FRA rules, throughout the "recovery process", prior to allowing SDTI to reopen the mainline tracks to operate at full speed. CPUC inspectors also verified SDTI light rail vehicles were being maintained, even though the wheel truing machine was lost. SDTI had adequate rail wheels in-stock to replace worn out train wheels, whenever necessary, and acquired a wheel truing machine "on-loan" from another RTA.



SAN DIEGO TROLLEY SYSTEM MAP

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SDTI Accident Summary

Accident Type	SDTI
Train vs Person/Train vs Bicycle/Other Conveyance (with rider) (53.8%)	21
Train vs Vehicle (38.5%)	15
Mainline Derailment/Yard Derailment (5.1%)	2
Other/Train vs Train/Yard Collision (2.6%)	1
Evacuation/Fire/Smoke (0%)	0
Train vs Trespasser (0%)	0
Grand Total	39

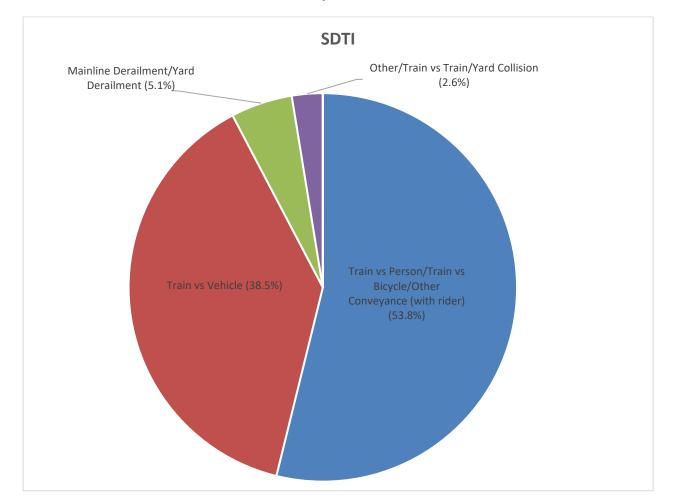


 Table 11: SDTI Accidents Primary Causal Factors - Calendar Year 2024

Figure 9: SDTI Accidents Primary Causal Factors - Calendar Year 2024

NOTE: The category "Other" is comprised of all accidents not included in the other categories. These include accidents resulting in substantial damage or evacuations, and a collision with an object such as signs/poles, crossing gates, signal cabinet door, motor vehicles, shopping carts, etc. left on or next to the tracks.

System Expansions and Capital Projects

SD10 Light Rail Vehicle Procurement

SDTI is procuring 47 LRVs known as SD10 project (Car Nos. 5046-5093) to replace the current SD-100 models cars which will be retired from revenue service. The vehicles are the same as the SD9 project vehicles and uses the same safety certification plan approved by Resolution ST-217 (10/11/18) for the SD9 project. The procurement process began September 2020 with an expected schedule completion and



SD-10 Car on the Greenline adjacent to Petco Park

acceptance of all 47 LRVs by mid-2025. As Siemens cars are delivered on-site to the SDTI yard, they will undergo commissioning and dynamics tests. CPUC staff will participate in the acceptance testing throughout the procurement process and to date has accepted 47 LRVs for revenue service.

The Orange Line Signaling System and Grade Crossing Upgrades Project to replace the current system is planned for Summer 2026. SDTI has submitted their draft Orange Line Signaling Project Safety Certification Plan to CPUC staff for approval.

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

The SFMTA is the public transportation system of the City and County of San Francisco. The San Francisco Municipal Railway (MUNI), along with the San Francisco Department of Parking and Traffic, became a part of the SFMTA on March 1, 2000. A seven-member board, appointed by the City of San Francisco Mayor, governs the SFMTA and the Director of Transportation serves as the agency's senior management officer.



The SFMTA MUNI was the first publicly owned streetcar system in a major city in the United States and began operation in 1912. It has a relatively small service area of just 46.7 square miles. SFMTA MUNI's fleet of rail transit vehicles consist of the subway and surface operating LRVs, surface operating Historic Streetcars (HSC), and cable cars.

SFMTA Rail System Description

SFMTA MUNI LRT operations are carried out by the Green Metro Division. It operates LRVs on six different lines.

- J Church Line
- K Ingleside Line
- L Taraval Line
- M Ocean View Line
- N Judah Line
- T Third Street Line

Trains on the SFMTA MUNI Metro Subway and Twin Peaks Tunnel operate under the control of a fully automated communications-based train control system. Most rail operations are on the surface, in semi-exclusive and mixed traffic right-of-way, with up to a 7% grade in some locations.

The Green Metro Division is also responsible for the operation of the HSC. The HSCs are operated on the surface and principally on the double track F – Market and Wharves Line.

The Cable Car Division is responsible for the operation of the cable cars. It provides passenger cable car service on three surface lines and traverse grades of up to 21%. The SFMTA MUNI Cable Car Division operates three lines. They include the Powell-Hyde Line, the Powell-Mason Line, and the California Street Line. Operating in mixed traffic, cable cars and vehicular traffic sharing traffic lanes, over narrow congested streets. A moving cable, below the surface of the street, provides propulsion for the cable cars via a mechanical grip, extending from the cable car and down through a continuous slot between the running rails. All onboard propulsion and braking



SFMTA MUNI System Map

controls for the cable cars are mechanical and are hand or foot-operated by the cable car operator. Cable car operation and equipment has changed little since the late 19th century and relies heavily on human performance and craft.

Accident Type	SFMTA
Train vs Vehicle (81.2%)	69
Other/Train vs Train/Yard Collision (11.8%)	10
Train vs Person/Train vs Bicycle/Other Conveyance (with rider) (4.7%)	4
Mainline Derailment/Yard Derailment (2.4%)	2
Evacuation/Fire/Smoke (0%)	0
Train vs Trespasser (0%)	0
Grand Total	85

SFMTA Accident Summary

Table 9: SFMTA (MUNI) Accidents Primary Causal Factors - Calendar Year 2024

CALENDAR YEAR 2024 ANNUAL REPORT -STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

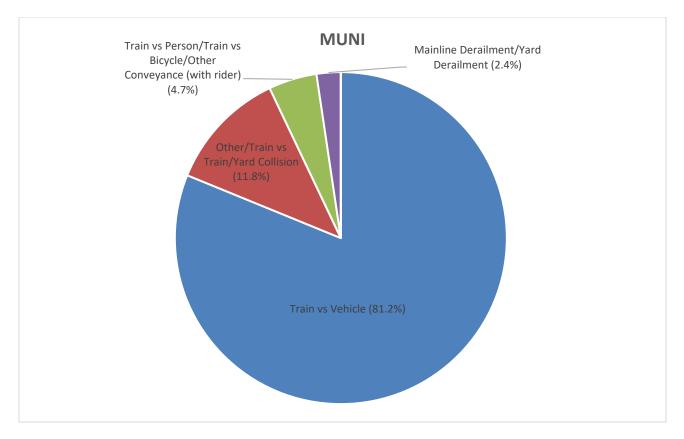


Figure 7: SFMTA (MUNI) Accidents Primary Causal Factors - Calendar Year 2024

NOTE: The category "Other" is comprised of all accidents not included in the other categories. These include accidents resulting in substantial damage or evacuations, and a collision with an object such as signs/poles, crossing gates, signal cabinet door, motor vehicles, shopping carts, etc. left on or next to the tracks.

System Expansions and Capital Projects

LRV4 Vehicle Procurement

SFMTA has initiated a LRV procurement project (LRV4 Project) to acquire up to 264 vehicles over a period of 15 years. The scope of the LRV4 project will include the design, manufacture, delivery, and test of up to 260 LRVs together with the associated services, spare parts, special tools, training, and documentation. The base quantity is 175 new vehicles. Another 151 new vehicles are projected for the replacement of the



existing 151 LRVs with a projected completion date in 2028. SFMTA has issued contract modifications for an additional 44 new vehicles, bringing the total fleet size to 219. An option for an additional 45 new vehicles may be issued in the future. The LRV4 is expected to have a 30-year life, which includes a mid-life overhaul. The LRV4 Procurement project will be funded through several different sources including federal funds. The SCP for the project was approved by the CPUC in Resolution ST-190 (11/10/2016).

Currently, SFMTA has 159 LRV4 vehicles that have completed testing and have been authorized by the CPUC for revenue service operation.

SANTA CLARA VALLEY TRANSPORTATION AUTHORITY

One of the largest transit networks in the San Francisco Bay Area, the Santa Clara Valley Transportation Authority (VTA) operates an urban transit service using a diverse fleet of vehicles and modes (bus, light rail, paratransit) across a 346 square-mile service area serving fifteen (15) cities within Santa Clara County. Light



rail service is provided from Mountain View to Alum Rock, Santa Clara to South San Jose, and Santa Clara to Santa Teresa, connecting with many of the area's high technology campuses using 97 low-floor light rail vehicles operating along three lines through with a system that is 41.1-mile system network with 59 light rail stations. VTA light rail service consists of three (3) service lines, the Blue, Green, and Orange Lines. VTA also operates four historic trolleys through the downtown San Jose Transit Mall, which occasionally provide service on a seasonal basis.

VTA participates as a funding partner in regional rail services including Caltrain, Capitol Corridor, and the Altamont Corridor Express in Santa Clara County. As Santa Clara County's congestion management agency, VTA is responsible for countywide transportation planning, including congestion management, design and construction of specific highway, pedestrian, and bicycle improvement projects, as well as the promotion of transit-oriented development.

The VTA Board of Directors has eighteen members and six ex-officio members, all of whom are elected officials appointed to serve on the VTA Board by the jurisdictions they represent. Fifteen Directors are city council members and three are County Supervisors. Twelve Directors serve as voting members and there are six Directors who serve as alternates. The ex-officio members are non-voting members and are the three Santa Clara County representatives to the Metropolitan Transportation Commission.



VTA LIGHT RAIL SYSTEM MAP

VTA Rail System Description

Green Line

The 13.9-mile Green Light Rail Line operates north-south from Campbell to San Jose and Santa Clara. It overlaps the Blue Line between downtown San Jose and north San Jose. The Downtown Transit Mall in San Jose serves as a hub for rail/bus connections. Light rail and Caltrain service connects at the Diridon Station in San Jose. Levi's Stadium is located near the Great America Light Rail Station. The Green Line has 26 light rail stations.

Orange Line

The 17.7-mile Orange Line operates east-west from Mountain View to Alum Rock, with a major transfer point at Baypointe to the Blue Line. Light rail and BART service connects at the Milpitas Station, while the Caltrain connection is at Mountain View. Levi's Stadium is located near the Great America Light Rail Station. The Orange Line has 26 light rail stations.

Vasona Corridor (Part of the Green Line)

Within the 15-mile Vasona Corridor, VTA operates 5.3-miles of its light rail system parallel to Union Pacific Railroad (UPRR) right-of-way sharing 14 highway-rail grade crossings. The Vasona Corridor has 8 light rail stations and links to Caltrain, ACE, and Capitol Corridor service via the Diridon Light Rail Station. This section of the corridor is an FRA shared corridor starting just beyond the Diridon Light Rail Station and running up to the Winchester Light Rail Station. UPRR and VTA trackways do not physically share or cross tracks in this corridor.

VTA revenue service began in 2005, VTA performs all dispatching (except for controlling UPRR train movement) and track zone/right-of-way (ROW) maintenance functions in the shared portion of the corridor requiring VTA to comply with specific FRA regulations related to rail operations, trackway, grade crossing warning systems, signals maintenance, and rail safety. The FRA has approved VTA for a 5-year waiver (Docket #FRA-1999-6254) granting full relief from 49 CFR Part 219 and partial relief from 49 CFR Part 225 as of October 6, 2020.

BART Silicon Valley Extension - Phase I

The BART Silicon Valley Extension Project is a 16-mile extension of the BART system to Santa Clara County that was funded by VTA and constructed to BART standards. VTA owns the assets constructed, however BART will independently operate the extension as part of its system. Phase I, the Berryessa Extension, is a 10-mile extension, including two BART stations. This extension begins in Fremont, south of the Warm Springs/South Fremont BART Station, and proceeds along the former UPRR ROW through Milpitas, the location of the first station, to the Berryessa area of North San Jose, the



Milpitas Transit Center, connection between BART and VTA

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location of the second station. The Berryessa Extension (Phase I) opened for revenue service on June 13, 2020.

VTA Accident Summary

Accident Type	VTA
Train vs Vehicle (47.5%)	19
Train vs Person/Train vs Bicycle/Other Conveyance (with rider) (27.5%)	11
Other/Train vs Train/Yard Collision (15%)	6
Mainline Derailment/Yard Derailment (7.5%)	3
Train vs Trespasser (2.5%)	1
Evacuation/Fire/Smoke (0%)	0
Grand Total	40

Table 12: VTA Accidents Primary Causal Factors - Calendar Year 2024

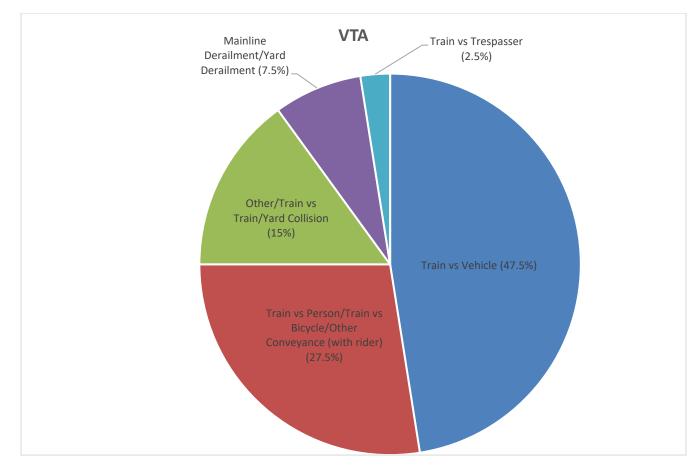


Figure 10: VTA Accidents Primary Causal Factors - Calendar Year 2024

NOTE: The category "Other" is comprised of all accidents not included in the other categories. These include accidents resulting in substantial damage or evacuations, and a collision with an object such as signs/poles, crossing gates, signal cabinet door, motor vehicles, shopping carts, etc. left on or next to the tracks.

System Expansions and Capital Projects

Eastridge to BART Regional Connector Project

The Eastridge to BART Regional Connector project is a 2.6-mile extension from the existing Alum Rock Station to Eastridge Transit Center. The alignment will be primarily grade-separated. The project is being implemented in phases. Phase I was completed in the Spring of 2015, and included the installation of sidewalk, landscape, and street lighting on Capital Expressway from Capital Avenue to Tully Road and the reconfiguration of the Eastridge Transit Center. Phase 2 will extend light rail from the existing Alum Rock Light Rail Station to the Eastridge Transit Center. Light rail will operate primarily in the center of Capitol Expressway in an elevated track structure from Capitol Avenue to Tully Road. The Eastridge extension will include two stations: Story and Eastridge. The SSCP was approved by the CPUC in Resolution ST-88 (5/24/2007), however, VTA provided an updated revision of the SSCP in early 2020 and CPUC reviewed and approved the revision in July 2020. Construction officially commenced with a groundbreaking ceremony on June 8, 2024. The project is expected to take approximately four years to complete, with revenue service anticipated to begin in 2029.

BART Silicon Valley Extension Project - Phase II

The BART Silicon Valley Extension Project is a 16-mile extension of the BART system to Santa Clara County that is being funded and constructed to BART standards by VTA. VTA will continue to own the assets it funds and constructs, however BART will independently operate the extension of its system.

VTA is completing design and engineering for Phase II (6 miles) of the BART Silicon Valley Extension, which includes a subway tunnel through downtown San Jose, 4 stations and a Newhall Yard Maintenance Facility in the City of Santa Clara. Construction of the second phase is expected to begin in 2025 with passenger service targeted for 2039. The SSCP for this project was submitted by BART and was approved by the CPUC in Resolution ST-83 (2/15/2007). On June 16, 2021, CPUC staff received the



Berryessa Transit Center, connection between BART and VTA

project SCP for phase II, and CPUC approval was sent on August 17, 2021, approving the SCP. The project new baseline cost and schedule estimates are total project cost of \$12.237B and Revenue Service Date in February of 2039. The Tunnel Boring Machine has been procured and is currently being assembled. Systems and Facilities design is approximately 60% complete and is currently on hold.

CPUC staff continue to attend the FTA Project Management Oversight Contractor, Safety and Security Review Committee, and Fire Life Safety and Security Committee meetings. Major cost saving ideas under discussion and review By VTA include station layout reconfiguration, parking structure reduction, review design criteria/specifications/requirements, and tunnel interior reconfiguration.

Procurement of an additional 48 new LRVs for BSVII is in progress. Alstom will be delivering these vehicles in CY 2025.

Light Rail Signal Priority Detection Upgrades Project:

The work involved is a replacement of the Train-to-Wayside hard-wired system with a new GPS-based LRV detection system to act as primary detection system for requesting transit service priority at nongated signalized intersections. The necessary equipment for the work would be installed on 98 of VTA's light rail vehicles and would be installed at 89 signalized intersections. VTA submitted the project SCP on May 5, 2021. CPUC staff reviewed and approved the project SCP on June 30, 2021. At its August 19, 2021, meeting the Commission approved Resolution ST-245. Ninety-six light rail vehicles have been installed with the necessary equipment. Final testing will commence in February/March 2025.

SUMMARY OF ACTIVITIES FOR NON-FTA REGULATED RAIL TRANSIT AGENCIES FOR CALENDAR YEAR 2024

No accident graphs are shown for the smaller non-FTA regulated systems, because only one very minor reportable accident occurred on these smaller systems during the reporting period. Several of the systems have never experienced a reportable accident.

AMERICANA AT BRAND TROLLEY

The Americana At Brand (AAB) trolley began service in 2008 and is owned by Caruso Affiliated in the City of Glendale in Los Angeles County. The AAB trolley operates on a single track that travels around the AAB shopping center from Americana Way to Caruso Avenue. The AAB trolley is a single-story vehicle mounted on the undercarriage of a circa early 1900s trolley from City of Milan, Italy. The trolley is powered by on-board batteries and has a detachable unpowered car.



Americana At Brand Trolley

The AAB trolley operates on about one third mile of track and is capable of speeds of up to 5 miles per hour. The trolley is operated by two-person teams and can seat up to 72 passengers. Caruso Affiliated utilizes contracts with LAZ Parking to operate the trolley with properly trained operators and Midwest Trolley Services to provide maintenance of the trolley.

In collaboration with CPUC staff, Caruso Affiliated is currently working on the first draft of their Public Transportation Agency Safety Plan for Commission approval.

ANGELS FLIGHT RAILWAY COMPANY FUNICULAR

Angels Flight is a landmark funicular railway that was originally built in 1901 in the Bunker Hill region of downtown Los Angeles. Between 1901 and 1969, Angels Flight was owned by 6 different entities, with the funicular eventually coming under the control of the now defunct Community Redevelopment

Agency of the City of Los Angeles (CRA/LA). CRA/LA was the owner of Angels Flight and dismantled the funicular in 1969.

In 1996, after 27 years of storage, CRA/LA oversaw the project to restore and reconstruct Angels Flight. The funicular was reopened to the public after being reinstalled half a block south of its 1969 location, now located between 3rd and 4th Streets on Hill Street in downtown Los Angeles. Since 1997, Angels Flight has been effectively owned by the Angels Flight Railway Foundation (AFRF) through a 99-year long-term ground lease.

When the system was rebuilt, several modifications were made to the drive and braking systems. In 2001, the modified drive system failed and one of the cars rolled freely down the 33-degree incline before striking the other car. One passenger was killed, because of the accident, five passengers received serious injuries, and two passengers received minor injuries. The accident was thoroughly investigated by the CPUC and the NTSB. The funicular was taken out of revenue service and shut down for several years because of this accident. NTSB investigators made specific recommendations for a track-adjacent emergency walkway and raising the end doors to prevent passenger ejection in the event of an accident.

In January 2007, AFRC personnel notified CPUC staff of their intent to refurbish and re-open Angels Flight. AFRC contracted engineering and manufacturing services to refurbish Angels Flight. After CPUC staff's review of the system upgrades and approval of their request to place the system back in service, Angels Flight was once again reopened to the public in March 2010, with improved safety features. The improvements included a secondary safety cable, redundant fail-safe braking, and failsafe carrier track brakes. The mechanical drive was once again



Angels Flight Railway Company Funicular

redesigned, a state-of-the art controller was installed, and the system was refurbished in conformance with funicular standards developed by the American National Standards Institute (ANSI B77.2 – 2004). NTSB noted upon reopening that the CPUC had not required implementation of the two NTSB recommendations from the 2001 accident. CPUC staff noted at the time that the ANSI Standards did not specifically require such additions. The system operated from then until a further accident in 2013.

In September 2013, a derailment of one of the cars occurred in which a downward moving car derailed. Although there were no injuries during the derailment, and it resulted in only minor displacement with

CALENDAR YEAR 2024 ANNUAL REPORT -STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

just the wheel dropping off the track, this was a serious incident. Several contributing factors were identified as causes of the derailment, including improper operating practices that bypassed safety functions of the funicular system, inadvertent carrier brake activation, and carrier brake design issues. The system remained out-of-service for over three years.

In late 2016, AFRF notified CPUC staff that it had acquired engineering services to address the system and operational failures that lead to the 2013 derailment and intended to bring the system back into service. On August 31, 2017, the system was brought back into service after CPUC approval of the Safety Certification Verification Report (SCVR) with new operational management under the Angel's Flight Development Company (AFDC).

In the Fall of 2024, Angels Flight Railway successfully completed its scheduled Control System Test, a procedure that is performed every seven years. Additionally, the safety and hall cables were replaced as part of routine maintenance to ensure the continued safe operation of the railway. More recently, in collaboration with CPUC staff, Angels Flight updated their existing System Safety Program Plan (SSPP) to address comments and revised it to the Public Transportation Agency Safety Plan (PTASP).

CPUC staff is continuously monitoring Angels Flight's operations status and monthly fault logs to ensure system safety.

RTSB plans to conduct a triennial audit of Angels Flight in 2025.

GETTY CENTER MUSEUM AUTOMATED PEOPLE MOVER

The Getty Center Tram is an Otis Hovair APM located in the City of Los Angeles serving the J. Paul Getty Center Museum. The Getty Center Tram was opened at the end of 1997. It is an electric, cabledriven hover train, with 2 tram sets of 3 cars each. When both three-car trains are operating, it has the capability of transporting 1,200 passengers per hour in each direction.

The Tram is located north of Brentwood in the Westside Region of Los Angeles and links a street-level parking area to the Getty Center Museum, located on a hilltop three-quarters of a mile away. The lower station at the bottom of the hill lies beside Sepulveda Boulevard and the San Diego Freeway. The upper station at the top of the hill is located in the arrival plaza of the museum and is



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part of the museum structure. The tram guideway follows the Getty Center Drive and has a bypass section mid-route.

Unlike most train cars, which are wheeled vehicles, the Getty Center Tram is suspended by a cushion of air. When the air suspension system is deactivated, the vehicle rests on a series of skids which also serve as a part of the emergency braking system. Otis company personnel operate and maintain the system under contract.

Although the Getty Center Tram started operating in 1997, it was not until 2013 that the CPUC asserted jurisdiction for safety oversight of the system following an evaluation of unregulated rail fixed guideway systems throughout California. CPUC staff worked with Getty personnel to develop the initial Getty System Safety Program Plan (SSPP) meeting CPUC GO 164 series requirements. Full implementation of the SSPP commenced in January 2015. More recently, Getty personnel developed a Public Transportation Agency Safety Plan (PTASP) Revision 0, which was revised as Revision 1 per CPUC staff comments and approved by CPUC in January 2022. In February 2022, Getty personnel submitted PTASP Revision 2 with minor revisions. Based on CPUC staff comments, Getty revised and resubmitted PTASP Rev 2 in November 2022, which was approved by CPUC in December 2022. Recently, Getty made changes to PTASP Rev 2 to incorporate CPUC's notification to include service impacts due to natural events and updates to ensure compliance with General Order 164-E. Getty submitted Revision 3 for its PTASP and it was approved by CPUC in June 2024.



Getty personnel are actively engaged in the planning and execution of the Tram Renovation Project. The project team recommended Doppelmayr as the winning team to the selection committee in early 2024. The Getty Tram is scheduled to be offline for the entire 2027 calendar year for construction. Passenger service is expected to resume in January 2028, aligning with the Summer Olympics.

RTSB conducted a triennial audit of the Getty Tram in October 2024. RTSB staff are preparing the audit reports.

GROVE TROLLEY

The Grove Trolley began operation in 2002 and is owned by Caruso Affiliated in the City of Los Angeles. The Grove Trolley operates on a single track that travels along First Street between The Grove open air shopping center and the Original Farmers Market. The Grove Trolley is built on a historic undercarriage from a Boston streetcar of the 1950s. It is double-deck and open-air, with two spiral staircases that lead to the upper deck. The trolley is powered by onboard batteries and computerized digital controllers manage all trolley functions.



Grove Trolley

The Grove Trolley operates on about one quarter mile of track and is capable of speeds of up to 5 miles per hour. The trolley is operated in two-person teams and can seat up to 56 passengers. Caruso Affiliated utilizes contracts with LAZ Parking to operate the trolley with properly trained operators and Midwest Trolley Services to provide maintenance of the trolley.

In collaboration with CPUC staff, Caruso Affiliated is currently working on the first draft of their Public Transportation Agency Safety Plan for Commission approval.

LOS ANGELES WORLD AIRPORTS AUTOMATED PEOPLE MOVER

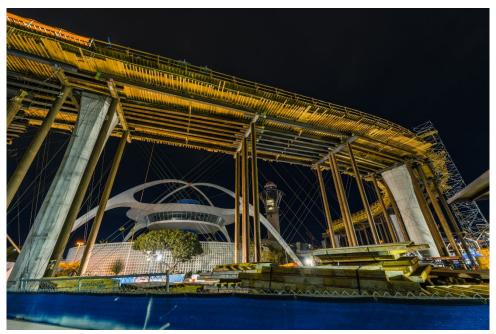
Los Angeles World Airports (LAWA), the governing body of Los Angeles International Airport (LAX), is developing a multi-billiondollar upgrade to the ground transportation system at LAX. The project is known as the LAWA Landside Access Modernization Program. The project will add six stations and an elevated guideway between the



Los Angeles World Airports Proposed Rail System

terminals and ground transportation options. The APM will operate 24 hours a day, seven days a week on the 2.25-mile elevated guideway. Three new Central Terminal stations will connect to stations at the new Consolidated Rent-A-Car facility, airport parking, and LACMTA rail transit and bus facilities. The Airport Metro Connector (AMC), which will later be known as LAX/Metro Transit Center, will be a multilevel station connecting the LAX APM East Intermodal Transportation Facility (EITF) to the new LACMTA K Line (formerly Crenshaw/LAX Line).

The stations in the Central Terminal Area will provide fast and easy connections to nine airline terminals with a pedestrian walkway system leading to the terminal stations. The project SCP was approved by the Commission in Resolution ST-212 (10/11/2018). LAWA broke ground on the APM project in March 2019 and the APM is expected to open in January 2026.



CALENDAR YEAR 2024 ANNUAL REPORT -STATE SAFETY OVERSIGHT OF RAIL FIXED GUIDEWAY SYSTEMS

Forty-four cars will be built for the APM system. The first cars arrived at the LAX site in June 2022. As of August 2024, the final 4 of 44 cars have arrived at LAX. All cars are currently undergoing testing in the Maintenance and Storage Facility (MSF). In April 2024, the project reached a milestone driving the Maintenance Service Vehicle on the guideway from the MSF to ITF West Station and then east to the Consolidated Rent-A-Car Facility. On November 19 a new stage of testing brought APM cars into the Central Terminal Area (CTA) for the first time to confirm vehicle clearance. The initial clearance tests will run at minimum speed which will be increased in further testing in 2025. As of September 18, 2024, station construction progress is at 96% completion and as of May 2024, guideway construction/installation finishes are at 96% completion.

SACRAMENTO COUNTY DEPARTMENT OF AIRPORTS AUTOMATED PEOPLE MOVER

The SCDOA installed and operates an APM between its central terminal and B gates concourse. The APM System includes a completely automated dual lane shuttle offering passengers a connection between the Central Terminal B and Airside Concourse B, with an emergency/backup walkway located between guideways. Two passenger stations with flowthrough configurations (one center platform and two side platforms) are in the Central Terminal building and the B Concourse building.



Automated People Mover at Sacramento International Airport

SCDOA has contracted with Bombardier (now Alstom) for the design, supply, installation, operation, and maintenance of the APM system. The complete system includes power distribution, power rail and vehicle power collector assemblies and interface, communication system, communications-based train control system required to operate the system, automatic station platform doors, and CX-100 vehicles.

The CX-100 vehicle is a fully automated, air-conditioned vehicle capable of operating in various modes twenty-four hours per day. A maintenance facility, including the Central Control Room, is located on level one under Concourse B station.

SCDOA underwent a triennial audit at the end of 2024. CPUC staff are preparing the audit reports.

SAN FRANCISCO INTERNATIONAL AIRPORT AIRTRAIN AUTOMATED PEOPLE MOVER

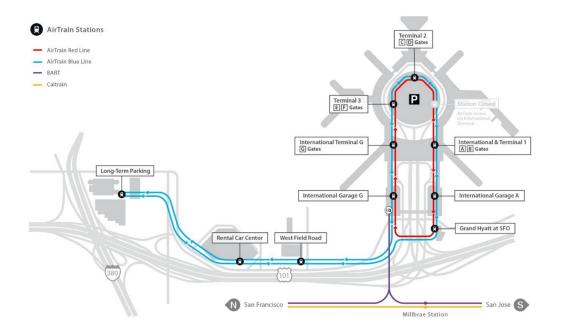
The San Francisco International Airport AirTrain APM system began operation on February 24, 2003, as a sixmile system. It operates 24 hours every day, providing free service throughout the San Francisco International Airport. The AirTrain was originally contracted to Bombardier (now Alstom) as a design-build-operate-maintain project. The system is owned by the San Francisco Airports



Commission and currently operated and maintained by Alstom.

With a fleet of 42 CX-100 vehicles including a Maintenance Recovery Vehicle, the 6-mile system serves nine stations connecting all the airport's terminals, hotel, parking garages, the Rental Car Center and an external connection to the BART Airport Station.

CPUC staff will be scheduling a triennial system safety and security audit to be conducted in 2025.



SYSTEMS IN DEVELOPMENT OR FUNDING STAGES

INGLEWOOD TRANSIT CONNECTOR PROJECT

The City of Inglewood has proposed an elevated APM that aims to address a first/last mile gap in Los Angeles County's public transportation network. This proposed project will connect the LACMTA's K-Line Downtown Inglewood Station to the City's housing and employment centers, and

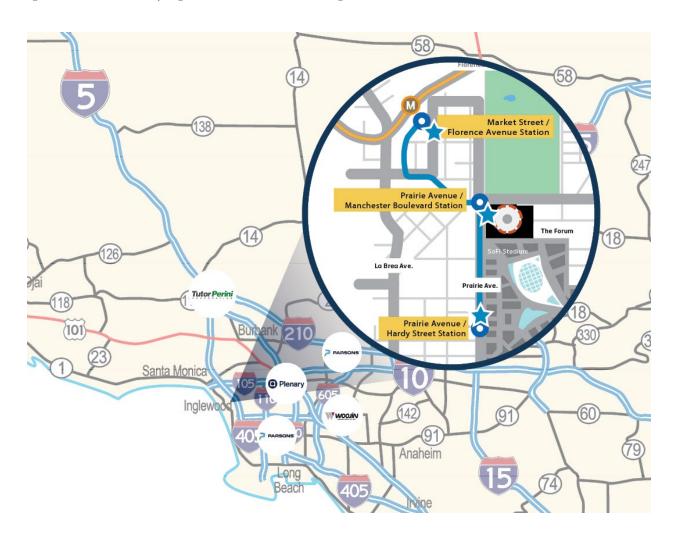


sports and entrainment venues. The project, which will be 1.6 miles in length, will feature three stations, a maintenance and storage facility, two power distribution system substations, and three new park and ride lots along the route.

In March 2021, LACMTA's Board approved the formation of the Inglewood Transit Connector Joint Powers Authority (JPA) with the City of Inglewood to implement and operate the project. The City of Inglewood is the lead agency for the project and is responsible for overseeing various aspects. On January 31, 2023, the California State Transportation Agency awarded a \$407 million grant to assist with the construction. Currently, the City of Inglewood and the JPA are working with the FTA to secure additional funding through a Capital Investment Grant. This project, which will be a Design Build Finance Operation and Maintenance (DBFOM) project, is expected to break ground in 2024 with the goal of providing passenger service in time for the 2028 Olympics.

The Inglewood Transit Connector (ITC) Project recently gained approval for a substantial federal investment of \$1 billion. This significant funding infusion represents a pivotal move for the project, propelling it closer to the attainment of full financial support.

The ITC project has recently advanced with the selection of Elevate Inglewood Partners, a publicprivate partnership consortium comprised of Plenary Americas US Holdings, Tutor Perini Corporation, Woojin Industrial System, Parsons, and Alternate Concepts, as the Best Value Proposer. Over the past several months, the project team has concentrated efforts on contract negotiations and early design planning. However, a gap in funding has emerged, and on October 24, 2024, the South Bay Council of Governments Governing Board declined to approve the requested funding for the ITC. In response, the team is actively engaging with the City and the selected bidder to identify potential solutions that align with both the City's goals and available funding.



Inglewood Transit Connector Proposed System Map

LOS ANGELES STREETCAR

The Los Angeles Streetcar is a project in Downtown Los Angeles (DTLA) that is advancing under the Community Facilities District that is a special tax voted by area residents. Additional funding sources include an FTA Small-Starts Grant, Los Angeles County Measure M transportation funding, and some elements of Public-Private Partnerships. In 2013, the Los Angeles City Council approved \$295 million in operations funding. The Los Angeles Streetcar is proposed as an urban circulator that was designed to meet the needs of DTLA residents, commuters, and tourists. The 3.8-mile route will run approximately 18 hours a day to connect South Park, the Financial District and Historic Broadway, Grand Park and the Civic Center, the Fashion District and the Convention Center, Crypto.com Arena, and LA Live.

The Los Angeles Streetcar will also serve as a much-needed connector to key local and regional bus and rail lines, serving as the first/last mile solution needed to bridge the gaps in DTLA's existing public transportation system. LACMTA is assisting the City of Los Angeles on the project. In 2019 the project received Federal National Environmental Policy Act clearance and California Environmental Quality Act clearance. No progress has been made by the project's proponents since 2019. A SCP will be submitted to CPUC in the future if the project is funded and approved.



Los Angeles Streetcar Proposed System Map

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SUMMARY

This Annual Report, as required by Code of Federal Regulation, Title 49, Sections 674.13(a)(7) and 674.39(a), provides a summary of the activities of California's State Safety Oversight program for Rail Fixed Guideway Public Transportation Systems.

The California Public Utilities Commission (CPUC) continues with its ongoing safety and security oversight activities for Rail Transit Agencies (RTAs). The Federal Transit Administration certified CPUC as California's State Safety Oversight Agency (SSOA) on October 23, 2018. The CPUC's SSOA program has been a national leader for years and continues to lead in developing a rail transit field inspection program, a citation program, on-line tools for reporting accidents and tracking corrective action plans, and other areas that improve safety.

In 2022, CPUC staff initiated a project to develop a risk-based inspection (RBI) program, as directed by the Federal Transit Administration (FTA). CPUC staff started holding meetings with the federally funded rail transit agencies to develop procedures for data collection, sharing, and analysis. On October 30, 2024, RTSB submitted to FTA a revised Program Standard establishing CPUC's RBI program. On November 12, 2024, FTA approved CPUC's RBI program.

In 2025, RTSB staff will continue its rail transit safety oversight activities including routine and riskbased inspections of facilities and operations, oversight of capital projects, and investigations of accidents and other incidents of rail transit agencies. Plans for 2025 also include recommending to the Commission making revisions to CPUC General Orders 164-E and GO 175-A; continue developing the new Rail Safety and Security Information Management System (RSSIMS) database; and adjusting its inspection program to meet CPUC's risk-based inspection program.