Rail Safety Division



Monthly Performance Report

September 2020

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Disclaimer

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COMPLIANCE WITH ORDERING PARAGRAPHS (COPS)

Through September 30, 2020, the Rail Safety Division (RSD) showed 289 total entries in the COPS system, with 0 reaching compliance, 287 (99%) not yet due for compliance, and 0 (0%) out of compliance. 0 are pending verification. 288 (100%) of all Ordering Paragraphs are assigned to members of staff. One Ordering Paragraph is pending assignment to staff.

During September 2020, there were 0 new OPs recorded to the COPS database for the Rail Safety Division.



MONITORING THE WHISTLEBLOWER WEBSITE

The Risk Section has been overseeing intake for complaints that arrive via a "whistleblower" application on the Commission's web site. Whistleblower protections are afforded to utility employees and contractors who report potentially unsafe or illegal practices.

STATISTICS - 1/01/20 - 9/30/20

Note: This is for complaints filed using the on-line Whistleblower Application ONLY.



RAILROAD OPERATIONS SAFETY BRANCH - ROSB

In September 2020, the RSD Railroad Operations Safety Branch (ROSB) completed the following:

| Railroad Operations Safety Branch | Sept- 2020 | YTD 2020 |
|-----------------------------------|---------------|-------------|
| New Incidents Investigated | 5 | 70 |
| Informal Complaints Investigated | 0 | 24 |
| Safety Assessments/Reviews | 15 | 105 |
| Compliance Actions | 803 | 9609 |
| Major Inspections Completed | 3 | 24 |
| Operation Lifesaver Presentations | 0 | 11 |

ROSB Inspection, Investigation & Field Activities

September 1, 2020: Six CPUC Rail Safety Inspectors took part in a multi-discipline inspection of the Central California Traction (CCT) Railroad in the Port of Stockton. The purpose of the multi-discipline inspection was to verify compliance with the Code of Federal Regulations (CFR), CPUC General Orders (GOs), and railroad operating and safety rules.

During the inspection, the inspectors noted that the train crew was not complying with the regulation regarding proper operation of hand operated switches. While operating the hand-operated switch, the crew member did not verify that it was properly lined for their intended route, that the points fit properly, and the target, if equipped, corresponds with the switch's position. Additionally, the inspectors observed the crew not complying with their railroad safety rules by walking directly across the track with less than 20 feet from the front of their locomotive while it was moving towards them. While checking the Port of Stockton and satellite yards for proper securement of unattended equipment, the inspectors observed a crossover track not lined for a corresponding route as required. If the crossover is not correctly lined, it may cause a derailment or come into contact with equipment or personnel on an adjacent track.

The inspectors discussed the situation with the operating crews during a break in their switching duties. The inspectors emphasized the extreme danger of walking in front of moving equipment without sufficient distance, which could cause serious injuries or even death if employees were to stumble or trip while crossing the tracks. The inspectors also discussed properly operating hand throw switches and the hazards to other crews and equipment when crossovers are not lined correctly for a corresponding route. Failure to keep the crossovers in a corresponding route could result in a collision with other equipment or personnel, or cause a derailment. The defects noted were discussed with the CCT General Manager who took remedial action to correct the situation to prevent any reoccurrence that may affect safety.

The inspectors also performed an inspection of the CCT yard and discovered several CPUC GO 26-D, 72-B, and 118-A defects. The inspectors observed several trees and tumble weeds growing within 8' 6" of the centerline of a track and a fence, impeding the minimum side clearance, which could cause an employee riding the side of a car to be struck and injured. Additionally, while inspecting the grade crossing at Washington and Garfield St., the inspectors identified two areas at the crossing where the asphalt has risen above the top of the rail instead of being flush with top of rails, not corresponding to the height of railhead. This condition does not meet GO 72-B Standard No. 1 requirements. The inspectors additionally noted debris in the walkway near the crossing within 8'6" from the centerline of track, creating a tripping hazard for employees potentially on the ground to flag the crossing.

The inspectors also performed an inspection of 20 ethanol cars at Pacific Ethanol. The inspectors found two tank cars with several defective conditions during the inspection, which included freight car truck side bearings worn beyond manufacture limits, an air brake reservoir tank mounting bracket broken, an end platform broken, and a rail car end coupler height too low. The defects were documented and reported to the CCT General Manager, who took remedial action to correct the defects and bring the yard and all cars into regulatory compliance.

September 7, 2020: A CPUC Rail Safety Inspector who specializes in Operating Practices performed an inspection of Union Pacific's City of Industry yard. During the inspection, staff noted a locomotive that was physically fouling another track. A civil penalty was recommended for the equipment left physically fouling the track.

September 8, 2020: CPUC Rail Safety Inspectors conducted an inspection of the Union Pacific (UP) Placerville Branch near Rancho Cordova. This inspection focused on information received from UP employees that were concerned with signs along Mather Field Road, which were felt to present a close clearance contact hazard.

An inspection of signs adjacent to the UP tracks in the area revealed that three highway warning signs at this location created a contact hazard for railroad employees riding equipment. These signs were placed within 8'6" of the centerline of the track and were not in compliance with GO 26-D. The purpose of GO 26-D is to "prevent injuries and fatalities to trainmen by providing a minimum standard for overhead and side clearance on the railroad tracks". It is not uncommon for trainmen to ride the sides of equipment in this area when moving rail cars to a nearby industry. These signs were so close to the tracks that a railroad employee riding the side of moving equipment would surely have been knocked off the car and severely injured or killed. As a result of the inspection, the railroad moved the signs to bring them into regulatory compliance.

September 9, 2020: A CPUC Rail Safety Inspector conducted a hazardous materials compliance follow up inspection at JCI Jones Chemical in Torrance, California. The follow up inspection was scheduled after an initial inspection on July 16, 2020. During that inspection, there were several non-compliant issues identified for both Federal and State rail safety regulations. These centered around the facilities training procedures, walkway issues, and tank car unloading. The issues posed a serious threat to both the employees of the facility and the public surrounding the plant. The facility handles tank cars containing chlorine, which is a dangerous toxic hazard. The follow up inspection determined that company management implemented the necessary

corrections to the facility and its processes to bring them into compliance with Federal and State rail safety regulations.

September 15, 2020: CPUC Rail Safety Inspectors conducted a routine Operating Practice (OP) inspection of Amtrak's 8th Street Yard in Los Angeles and observed wheel skates and other mechanical department assets in the walkway of track 832 that were not in compliance with GO 118-A (3) which states: *The standards of each railroad corporation shall contain provisions for reasonably safe and adequate walkways adjacent to its tracks in all switching areas.* The wheel skates in particular posed a tripping hazard to employees that work within the area. The inspectors spoke to the Amtrak Mechanical Superintendent and notified him of the non-compliant tripping hazard. He then took remedial action to correct the hazard.

September 30, 2020: A CPUC Rail Safety Inspector conducted an inspection of the BNSF Railway Bakersfield train yard tracks. The inspectors observed non-compliance with GO 118-A. There was a red flag and portable derail in the walkway creating a tripping hazard to railroad employees. GO 118-A requires that areas used as walkways are to have regular and even surfaces free of tripping hazards without grades exceeding one to eight slope, in the walkways around the tracks where train crews are required to switch or perform inspections of trains that may stop for emergency. The train crews must have a safe walking path to prevent tripping hazards that could cause injury or harm. As a result of the inspection, the defective material was immediately removed, and the hazardous tripping condition was corrected.

September 30, 2020: A CPUC Rail Safety Inspector performed a follow up inspection to a November 22, 2019 inspection where a CPUC Rail Safety Inspector took exception to the surface of a public grade crossing in La Mirada, California on the BNSF Railway San Bernardino Subdivision. The inspector took exception to the condition of the crossing and identified the defective condition on a CPUC GO report for non-compliance with CPUC GO 72-B. The crossing was rough due to the age of the crossing and the heavy traffic on this road. The track had settled and was no longer at an even plane with the highway. While performing the follow up inspection the inspector confirmed that BNSF has brought the crossing into regulatory

compliance by removing the deteriorated crossing panels, repairing the track structure, and paving over the crossing with asphalt.











RAIL CROSSINGS AND ENGINEERING BRANCH – RCEB

In September 2020, the Rail Crossings and Engineering Branch (RCEB) completed the following:

| | September Closed | Closed YTD |
|--|---------------------|---------------|
| Crossing Incident Reviews | 18 | 186 |
| Safety Assessments/Quiet Zones/Reviews/Training | 35 | 430 |
| Proceedings, Resolutions and G.O. 88-B Reviews | 11 | 87 |
| Operation LifeSaver Presentations | 1 | 13 |

RAIL CROSSING INCIDENT INVESTIGATIONS

In September 2020, RCEB closed 18 incidents at highway-rail at-grade crossings (crossings).

These 18 incidents resulted in three fatalities and five injuries.





SAFETY ASSESSMENTS, QUIET ZONES AND REVIEWS

In September 2020, RCEB completed 35 rail-crossing safety assessments involving: communications, field inspections, meetings, quiet zone reviews, staff training, and diagnostic reviews with railroads and local agencies. These activities review existing crossings and proposed changes to crossing warning devices.



PROCEEDINGS, RESOLUTIONS AND G.O. 88B REVIEWS

In September 2020, RCEB approved 11 General Order 88-B applications for changes to existing crossings.



OPERATION LIFESAVER INC.

On September 17, 2020, RCEB Operation Lifesaver Inc. (OLI) participated in a Zoom presentation with TCAG - Active Transportation Advisory Committee. The participants consisted of representatives of various communities that are members of TCAG. Proclamation was issued declaring September as Rail Safety Month.

RAIL TRANSIT SAFETY BRANCH – RTSB

In September 2020, the Rail Transit Safety Branch (RTSB) completed the following activities:

CORRECTIVE ACTIONS PLANS

- 11 Corrective Action Plans (CAPs)¹ were opened.
- 29 were closed.

¹ General Order 164-E defines Corrective Action Plan as a plan developed by a Rail Transit Agency that describes the actions the RTA will take to minimize, mitigate, control, correct, or eliminate risks and hazards, and the schedule for implementing those actions.

ACCIDENT INVESTIGATIONS

- 20 accidents were reported by Rail Transit Agencies (RTAs).²
- 23 accident investigations were closed.

MAJOR AUDITS

- A Triennial Safety and Security Review of North [San Diego] County Transit District (NCTD) was conducted in August 2018. The security report and resolution have been approved by management and legal staff. A draft resolution of the safety report is under managerial review.
- A Triennial Safety and Security Review of San Francisco Municipal Transit Agency (SFMTA) was conducted in October 2018. The agency's 30-day review comments were received, and Staff have prepared a draft that is under managerial review.
- A Triennial Safety Review of Sacramento County Department of Airports (SCDOA) was conducted in May 2019. The agency's 30-day review comments were received, and Staff have prepared a draft that is under managerial review.
- A Triennial Safety and Security Review of the San Francisco Airport AirTrain (AirTrain) Automated People Mover (APM) was conducted in June 2019. A draft of the security report and safety report that will be subject to 30-day RTA review is being finalized by management.
- A Los Angeles Metropolitan Transportation Authority (LACMTA) Triennial Safety and Security Review was conducted in September 2019. A draft of the security report and

² Per General Order 164-E, the Commission must be notified within 2 hours by rail transit agencies of accidents if they include one of the following: a fatality (occurring at the scene, or within 30 calendar days following the incident); one or more persons suffering "serious injury" (as defined in GO 164-E); a collision involving a rail transit vehicle and another rail transit vehicle, or individual; a derailment of any rail transit vehicle at any location, at any time, whatever the cause; an evacuation for life safety reasons; or a runaway train. "Courtesy notices" are not included in these statistics.

safety report that will be subject to 30-day RTA review is being finalized by Staff for management review.

- The Bay Area Rapid Transit (BART) Oakland Airport Connector (OAC) Triennial Safety and Security Review checklists are complete, and the findings and recommendations are under Supervisor review.
- The Getty Tram Triennial Audit Triennial Safety and Security Review has been postponed due to conditions arising from the COVID-19 pandemic.
- The Triennial Safety and Security Review of Valley Transportation Authority (VTA) may be postponed until 2021 due to conditions arising from the COVID-19 pandemic.
- The Sacramento Regional Transit District (SRTD) Triennial Safety and Security Review is scheduled for October 19 to 30 of the current year and may be postponed due to conditions arising from the COVID-19 pandemic.
- The BART Triennial Safety and Security Review is tentatively scheduled for November 30 to December 11 of the current year and may be postponed due to conditions arising from the COVID-19 pandemic.

Administrative Accomplishments

- Training: From September 28th to October 1st, Joey Bigornia, Rupa Shitole, Michael Rose, and Richard Fernandez participated in a pilot of a new virtual course titled "Overseeing the Safety Management Process for State Safety Oversight Agencies" offered by U.S.
 Department of Transportation's Transportation Safety Institute.
- RSSIMS Replacement Project: The three rail branches (RCEB, ROSB, and RTSB) share a database called the Rail Safety and Security Information Management System (RSSIMS).
 RTSB is participating in activities to identify upgrades for the next version of the database.
- Rail Inspection & Corrective Action Plan System (RICAPS): RTSB is working with CPUC's Information Technology Services Division (ITSD) on developing a new on-line platform to automate the process for routing and tracking Inspection Reports and CAPs. The proposed system will allow both CPUC staff and RTA employees to submit, retrieve and manage the

information in a centralized database, thereby greatly enhancing efficiency, speed, and accuracy of tracking CAPs to minimize, mitigate, control, correct, or eliminate safety risks and hazards.

GENERAL ORDER AND RESOLUTION ACTIVITY

- Proposed Revision to GO 143-B: RTSB management is continuing its work on drafting proposed changes to General Order 143-B "Safety Rules and Regulations Governing Light-Rail Transit."
- Resolution ST-239: This Resolution grants the request of the BART for approval of the Safety and Security Certification Plan for their Traction Power System Improvements Projects. It was approved at the July 16 Commission meeting.

SAFETY CERTIFICATION AND OVERSIGHT OF RAIL TRANSIT AGENCY PROJECTS

- AirTrain Extension Project: On August 10, 2017, Resolution ST-205 approved AirTrain's Extension Safety Certification Plan (SCP). The project expands the existing AirTrain system to include a new Long-term Parking Garage Station and an additional in-line Hotel Station serving a future hotel. Several additional upgrades to facilities and equipment are part of the project. The project will have three Safety and Security Certification Verification Reports (SSCVR) as it has three phases. Project culmination and start of revenue service is anticipated to take place in 2020. RTSB management approved the SSCVR that allowed the Hotel Station (Phase 2) to begin revenue service in October 2019. All 42 cars have now been approved with line-of-sight communication upgrades. The estimated project completion timeframe for the Lot DD Station extension (Phase 3) is the end of the current year.
- BART Communications Based Train Control (CBTC): BART entered a \$798 million contract with Hitachi Rail STS USA, Inc to design and build a modern CBTC system. The agency intends for this project to "greatly improve (its) train service." The Project's SCP was approved by the Commission via Resolution ST-206. Once funds are secured, BART will issue the contractor a Notice to Proceed.

- BART Traction Power System Improvements Project (TPSIP): Five sites have been identified for installation of new traction power substations to support the traction power system improvements portion of the Transbay Core Capacity Program. The two West Bay sites are Civic Center Station and Montgomery Street Station and have estimated completion dates by the end of 2020. The three East Bay sites are in Oakland at Thirty Fourth Street, Concord at David Avenue and Minert Road and Richmond at Yard East, with completion dates not yet estimated. BART approved the winning construction bid for West Bay sites and is preparing contract. East Bay sites are in the engineering design phase. An SCP was approved via Commission resolution proceeding (ST-239) in July 2020. Staff attend the project's monthly Safety and Security Review Meetings.
- BART Irvington Station (IRV) 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 2027. The Project is in the engineering design phase. The SCP will be subject to review under a Commission resolution proceeding (ST-240) in November 2020.
- BART Fire Life Safety (FLS) Department: The agency has hired a Deputy Director for its FLS Department. The department was approved in the 2020 BART budget. The BART FLS Dept has identified three main functions: training and drills, inspections and coordinating with the Office of the State Fire Marshal. The FLS works with all the Bay Area local fire departments as well as the California State Fire Department (CalFire). The FLS Department played an instrumental role in the VTA Phase I Milpitas Station EVS testing. BART FLS is in internal discussions regarding the establishment of a review committee for that will identify and plan for mitigation of FLS concerns on BART projects. It is projected to launch by the end of the current year.
- BART New Vehicle Procurement: BART is in the process of procuring 1,200 new rail vehicles. There are two types of new vehicles, D-Cars and E-Cars. D-Cars have an operator's cab while E-Cars do not. Upon submittal by BART, Staff reviews testing and certification documents for each group of cars prepared for service and verifies compliance

with the testing and certification plan before authorizing the cars for revenue service. To date, RSTB management has certified and approved 241 vehicles for revenue service. A train separation occurred in service on the Bay Area Rapid Transit (BART) mainline on June 16, 2020, on Train T409 at 12:13 p.m. while moving at speed between 2 stations. Train T409 was reported to have separated between the sixth and the seventh car of a 10-car consist respectively between car 4124 and car 4103 (all other cars remained coupled). As the trainline continuity was broken, the emergency stop was applied on both halves of the separated train. Both halves came to a full stop a few feet apart as designed. The halves were re-coupled without any issue (mechanically and electrically) and passengers were unloaded at the next station. No passenger or BART staff injuries were reported following the incident. The root cause of the incident, which was found to be a combination of events and failures leading to the mechanical couplers between cars 4124 and 4103 in a partially uncoupled state which was potentially misinterpreted by the train yard crew and train operator and not reported by the TCMS for the existing design. This condition happened while the electrical couplers still advanced due to Main Indicator Valve (MIV) maladjustment and incorrect uncoupling operation/procedure, making it possible to move the train and getting it dispatched in service even though the mechanical couplers were in a partially uncoupled state.

BART Hayward Maintenance Complex (HMC) Project: This project is comprised of two phases. On November 16, 2018, RTSB management approved an element of the first phase of this project, the Component Repair Shop, to commence operations. The Central Warehouse is a second element of Phase One. An SSC meeting and walk-through of that element was conducted on June 25. BART plans to submit Certificates of Conformance, Design Criteria Checklists and supporting documents for the Certifiable Element of Central Warehouse of the HMC Project as approved by the Commission under Resolution ST-181 in in October or November 2020. This will be an interim SSCVR for Phase One. Construction on the Hayward Maintenance Complex Phase II East Storage Yard began on March 1, 2019. This yard will provide a storage venue for BART revenue vehicles and provide egress to the

BART A1 and A2 Mainline Tracks and the Hayward Test Track. Due to funding constraints, BART has sub-divided the HMC Phase II Project into three separate contracts. At the end of the Hayward Maintenance Project, BART will submit a final SSCVR that will cover both phases.

- Central Subway Project (CSP): SFMTA is excavating 1.7 miles of tunnel to extend the Muni Metro Third St. Line to provide a direct transit link between the Bayshore and Mission Bay areas to SoMa, downtown San Francisco, and Chinatown. The project currently has estimated dates of December 2020 for substantial completion of the project and the end of 2021 for service commencement. Heavy construction on stations will continue into the Fall and is scheduled for yearend completion. Staff participated in a meeting of the Safety and Security Certification Review Committee on July 16. Among the topics discussed were the following: construction progress and project schedule, construction specification conformance checklists, and quality assurance and control audit reports. In addition, Staff was provided with an update on the disposition of outstanding safety certification documentation that has been discussed in prior months' reports.
- LACMTA P3010 New Vehicle Procurement Project: 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. As cars are prepared for service, Staff will recommend official approval to RTSB management after a successful review of the Car History Books (testing documentation) in person. To date, RTSB management has certified for revenue service 185 vehicles. Shipments of the remaining P3010 cars are expected to resume in October.
- LACMTA 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 (HRV) to provide for the future expansions of Regional Connector and Purple Line Extensions, and to replace the aging HRV fleet operating on the Red Line subway. Resolution ST-185 approved the procurement option. Because of COVID-19 the arrival of pilot cars will be postponed from

December 2020 to June 2021. As a result, the specification conformance checklist review, a major component of the safety certification process, will also be postponed. The design checklist review has been completed, but since it will be a long period before the specification checklist is ready for review, Metro will send project updates every 3 months to RTSB Staff.

- LACMTA Regional Connector Project: Bored tunneling is completed and Flower Street cut and cover tunneling is 70% complete. All three underground stations have been excavated and are in the concrete phase. Rail installation has commenced. The wye junction that will connect the Blue/Expo and Gold Lines is nearing the end of the concrete phase. The existing Little Tokyo Station is scheduled for demolition in the 4th quarter of 2020 and bus bridges will be implemented. Staff regularly attends LACMTA's monthly Fire Life Safety & Security and Safety & Security Certification Review Committee meetings.
- LACMTA D (formerly Purple) Line (Westside) Extension Project: LACMTA is currently extending the Purple Line. The Westside D Line Extension, previously named the Westside Subway Extension, extends service from the terminus at Wilshire/Western Station to Westwood (UCLA and Veteran's Administration Hospital). This extension will consist of nearly nine miles of heavy rail subway and seven stations. The planned revenue service years for D Line Segments 1, 2, and 3 are 2023, 2025, and 2027. For Segment 1, the Tunnel Boring Machines (TBMs) have completed three out of four miles and the three underground stations are fifty-percent complete. A TBM for Segment 2 launched from Century City/Constellation Station on April 30, 2020 and will continue eastbound for approximately 2 years before meeting with Segment 1. Preparation is continuing for the TBM tail track excavation shaft (TTES) on the VA Hospital Campus, near the Westwood/VA Hospital Station where Segment 3 terminates. The TBMs for Segment 3 are scheduled to launch from the TTES in late 2020 or early 2021.
- LACMTA/MGLFECA Foothill Extension Phase 2B: LACMTA and Metro Gold Line Foothill Extension Construction Authority (MGLFECA) have submitted the project's SCP. Resolution ST-194 provided approval for the document on January 19, 2017. Phase 2B alignment is

from the current terminus of LACMTA Gold Line, Azusa Station, to the City of Montclair. It will traverse six cities with six new stations on 12.3 miles of light rail transit (LRT) at-grade track. In August 2019, the Foothill Gold Line Construction Authority awarded the Design Build contract to the Kiewitt Parsons Joint Venture. Due to funding issues, the current terminus of the alignment will be changed to Pomona Station with a contract option to build to Montclair if the Foothill Construction Authority can secure additional funding by September 2021. Heavy construction commences in July of the current year. Estimated completion of the Pomona segment is 2025. The contract option portion from Pomona to Montclair would be on a shared corridor with Metrolink. To date, 48 of 49 grade crossings submitted for the segment from Glendora to Montclair have been approved by the CPUC.

- LACMTA Crenshaw/LAX Corridor Project: LACMTA is constructing a new LRT line through the Crenshaw/LAX Corridor. The Line will travel 8.5 miles from the existing Metro
 Exposition Line at Crenshaw and Exposition Boulevards to the Green Line and will serve the cities of Los Angeles, Inglewood, El Segundo, and portions of unincorporated Los Angeles
 County. The expected substantial completion date is December 2020 or January 2021.
 Revenue service is expected to commence in 2021. LACMTA sent a letter requesting a waiver of GO-95 requirements for installation of their underground overhead contact rail in certain locations where insufficient clearance in the tunnel was identified. Staff is evaluating the request.
- LACMTA New A (formerly Blue) Line Project: LACMTA is making improvements to its A Line that runs from Downtown Los Angeles to Long Beach. The Blue Line was renamed the "A Line" prior to opening. The "A Line" re-opened to the public on November 2, 2019. Staff continue to monitor the project as there remains one pedestrian crossing under construction at the Willowbrook/Rosa Parks Station. On April 22, 2020 CPUC issued a GO-88 authorization for modifications to warning devices on the eastern half of the southern pedestrian crossing. On the western half, UPRR has constructed their crossing equipment, and Metro will interconnect their equipment with the UPRR system. The crossing was subject to system integration testing and for routes that did not meet minimum warning

times, a positive stop is required via Metro Rail Operations Bulletins (MROB). Test results were sent to RTSB and RCEB Staff for review and Staff performed an inspection of the crossing on October 6, 2020. RTSB and RCEB Staff requested Metro to determine a permanent solution to meet minimum warning times at the southern pedestrian crossing, instead of continuing the MROBs. Metro is in the process of determining a solution. Additionally, tests for Division 11 Blue Line Yard Train Control Upgrades, the last phase of New Blue, are scheduled to begin on October 24, 2020 and continue for several consecutive weekends. Metro will provide Staff with Division 11 test report submittals and Staff will be invited to witness the testing.

- Los Angeles Streetcar: The Los Angeles Streetcar is a project that is advancing under the Los Angeles County Measure M funding. The preliminary design is proceeding despite the lack of LACMTA's identification for near term funding.
- LAWA Automatic People Mover Project: Los Angeles World Airports (LAWA), the governing body of Los Angeles International (LAX) and Van Nuys airports, is developing a multi-billion-dollar upgrade to the ground transportation system at LAX. Of the six new stations, three will connect new rental car, airport parking and Metro facilities to the airline terminals. Those in the Central Terminal Area will provide fast and easy connections to nine airline terminals with a pedestrian walkway system. The Project's Design Criteria Conformance Checklist (DCCC) and Subsystem Hazard Analyses (SSHA) will be finalized in the coming months and will be reviewed in the Safety Certification Review Committee (SCRC), a subcommittee of the Safety and Security Review Committee (SSRC). Staff continue to participate in regularly scheduled safety certification meetings and contingency planning meetings.
- Orange County Transportation Authority (OCTA) OC Streetcar Project: The OC Streetcar (OCSC) project consists 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 project includes the procurement of 8 Seimens S700 LRVs. Delivery of the first LRV is scheduled for January 2021. Revenue service

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is currently scheduled to commence in October 2022. Staff continues to attend the SSRC, Construction Progress, and Fire Life Safety Committee (FLSC) meetings.

- Sacramento Riverfront Streetcar (SacRT): Due to funding constraints, the project will proceed following concurrence from all parties involved (City of Sacramento, City of West Sacramento and SACOG). SacRT is updating the "Small Starts" application to reflect the revised scope of the project plans that were submitted in February. The application will also provide a project rating. The "Small Starts" application consists of an updated cost (SCC Workbook), an updated Travel Forecast, an updated Land-Use and Economic Development Plan and an updated Financing Plan. SacRT Design and Environmental Consultants are ready to proceed once the funding constraints are resolved. The required contract amendments are expected to be approved by SacRT Board in August, followed in approximately six months by updated Design and Environmental Documents. If all goes according to plan, SacRT and the FTA intend to execute the Small Starts Grant Agreement by the Summer of 2021 and commence construction in the Fall of 2021. The parties anticipate submittal of a Safety Certification Plan to RTSB by January 2021.
- Sacramento Regional Transit District (SRTD) LRV (Light Rail Vehicle) Procurement Project: The first LRV is scheduled to be delivered to SacRT late November 2022. RTSB expects a Safety Certification Plan to be submitted by January 2021.
- Sacramento Regional Transit District (SRTD) Operations Control Center (OCC): This project will relocate the OCC from Metro to downtown. RTSB expects a Safety Certification Plan to be submitted by September 2020.
- Sacramento Regional Transit District (SRTD) SCADA: SRTD's Information Technology group has hired a Project Manager to seek grants and work with SRTD Engineering to complete a full assessment of their system.
- San Diego Trolley, Inc. (SDTI) Mid-Coast Corridor Project: The San Diego Metropolitan Transit System's (MTS) Mid-Coast Corridor Project is a 10.9-mile double-track light-rail transit line that begins at the Old Town Transit Center in San Diego. The project will provide future SDTI revenue service to the Linda Vista, Clairemont, University of California at San

Diego (UC San Diego) and the University City areas. Construction started in 2016 and revenue service is planned to begin late 2021. To date, no construction delays are anticipated.

- San Diego Light Rail Vehicle Procurement: SDTI is procuring 45 LRVs for the Mid-Coast Corridor Project. The procurement process began January 2018 with an expected schedule completion and acceptance of all 45 LRVs by June 2021. As Siemens delivers cars on-site at the SDTI Yard, they are undergoing commissioning and dynamics tests. Staff is participating in the acceptance testing throughout the procurement process. To date, 31 cars have been approved for revenue service.
- SFMTA LRV4 Procurement to Expand and Replace the Rail Fleet: SFMTA requested approval, in a letter dated June 2, for the utilization of three-car Siemens LRV4 consists in revenue operations or that additional field visits and ride-checks would be arranged to facilitate the requested approval in advance of July 17. During the LRV4 Safety Certification Audit Subcommittee Meeting on July 10, SFMTA addressed concerns that had been related in an e-mail from RTSB management on July 3. Among the topics addressed were the following: additional stress on components (a new shear pin has been designed and tested for this application); existing platform accommodation of longer consists; and onboard monitor visibility of third cars. The three-car configuration, planned for use beginning in September, is intended to facilitate social distancing for riders. A Staff ride-along will be planned in advance of the three-car 'roll-out.' On July 16, Staff authorized the 67th car for revenue service. On August,20, 2020, RTSB staff sent a letter to authorize SFMTA to place the final LRV4 car (2033) of the Phase 1 procurement into revenue service upon receipt of the letter. Currently, they have 68 LRV4's accepted and revenue service ready.

STATISTICS SUMMARY

| Investigations for Month | | YTD 2020 |
|--------------------------------|----|----------|
| Accidents Reported | 20 | 178 |
| Accident Investigations Closed | 23 | 264 |

| Complaints Investigated | 0 | 2 |
|--------------------------|----|-----|
| Rail Transit Inspections | 24 | 165 |
| Triennial Review | 0 | 0 |

| | | CAPs YTD |
|--------------------------------------|-----|----------|
| New Corrective Action Plans | 11 | 122 |
| From Triennial Review | 0 | 0 |
| From Incidents | 4 | 23 |
| From Internal Safety/Security Audits | 0 | 8 |
| From Rail Transit Inspections | 7 | 88 |
| From Hazard Management | 0 | 3 |
| Closed Corrective Action Plans | 29 | 192 |
| From Triennial Review | 017 | 36 |
| From Incidents | 0 | 32 |
| From Internal Safety/Security Audits | 2 | 12 |
| From Rail Transit Inspections | 10 | 109 |
| From Hazard Management | 0 | 3 |
| | | |

ONGOING DATA / TRENDS









CORT MONTHLY REPORT

In California during the month of September:

- > The railroads moved 1 train with 100 crude oil cars.
- > The railroads moved 9 trains with 922 ethanol cars.

<u>Plains All America</u> in Taft, California received zero crude oil trains. The trains are spotted by the San Joaquin Valley Railroad (SJVR) originating from their yard in Bakersfield. For the month of October zero crude oil trains are expected; none of these trains will be Bakken crude.

The SJVR also spots unit trains for <u>Kern Oil</u> which is a refinery operating in Bakersfield. Kern received one 100 car train this month. <u>Delta Trading</u> is a trans-loading facility located in Bakersfield where California oil cars are moved by train. Delta is still seeking a new customer.

IN OTHER NEWS

Departments of Transportation, Energy wary of setting new crude-by-rail rules

The U.S. Departments of Transportation and Energy have suggested in a report to Congress that regulation to define crude-by-rail movements using crude oil's vapor pressure isn't needed. The issue of vapor pressure as a factor in potentially restricting crude-by-rail movement is a hot topic because the state of Washington enacted a law in 2019 setting vapor pressure limits, while other states have lobbied the federal government to pursue a similar mandate. Washington state's crude-by-rail law calls for crude oil that will be unloaded in the state to meet a Reid Vapor Pressure limit of 9 pounds per square inch (psi). The law does not ban crude-by-rail movement in the state, and the state has argued that the law is meant to reduce the risk of explosions or potentially fatal derailments.

Crude-producing states such as North Dakota have argued that Washington state's mandate violates interstate commerce rules and effectively bans Bakken crude from being transported through the state. The federal government is still considering a request by North Dakota and Montana to weigh in on the issue.

The Departments of Energy and Transportation, which outlined their findings in an April report to Senate and House members, based their conclusions on a commissioned study from Sandia National Laboratories. The Pipeline and Hazardous Materials Safety Administration (PHMSA) and Transport Canada were also involved in commissioning the study.

"Based on the results of the study, which assessed vapor pressure at it affects the thermal hazards from the combustion events studied, the Department of Energy (DOE) and the Department of Transportation (DOT) find that no further regulation by the Secretary of Transportation or the Secretary of Energy or further legislation is necessary to improve the safe transport of crude oil with specific regard to vapor pressure," the April report said.

The report from the two federal agencies said the Sandia research compared several commercially available, industry standard sampling and analysis methods to a baseline instrument system from the U.S. Strategic Petroleum Reserve to determine the accuracy of evaluating crude oil vapor pressure and pressurized whole oil composition.

The researchers tested crude oils that ranged in vapor pressure and light ends content observed among domestic conventional and nonconventional crudes. The results were analyzed within the context of common liquid hydrocarbon fuels whose combustion properties overlap and exceed the vapor pressure of the tested crude oils.

According to the report's executive summary, the research found that "the similarity of pool fire and firehall burn characteristics pertinent to thermal hazard distances of the three oils studied indicate that vapor pressure is not a statistically significant factor in affecting these outcomes. Thus, the results from this work do not support creating a distinction for crude oils based on vapor pressure regarding these combustion events."

The federal government's response to the vapor pressure limits is still pending, but the American Fuel & Petrochemical Manufacturers (AFPM) supported the report's findings.

"The Sandia report confirms that the vapor pressure (VP) of crude in rail transport has no impact on the frequency or consequences of a derailment, and that the results of the Sandia study do not support creating a new regulatory distinction for crude oils based on vapor

pressure," said Rob Benedict, senior director of petrochemicals, transportation and infr100astructure at AFPM.

He continued, "These findings, based on three years of extensive study, further demonstrate that DOT/PHMSA should rescind its open rulemaking to set a nationwide VP standard and that the state of Washington's unlawful attempt to regulate the transportation of crude oil based on VP is flawed and does not enhance rail safety. ... Though efforts at the federal and state level to implement vapor pressure limits have always lacked the scientific evidence to support such an action, the findings of the Sandia study confirm that such an action has no basis in sound science. To address the root cause of derailments that release hazardous materials, DOT must refocus its efforts on improving track integrity and reducing human error in rail operations."

Ethanol Report

<u>Kinder Morgan</u> is a pipeline and off-loading facility located in; Wilmington, California adjacent to the BNSF Railway Yard Watson Yard which provides them spot service. The unit trains they receive are either 96 or 64 cars in length. The trains come from various suppliers and states but travel through California on BNSF lines only on their way to destination. When the train is ahead of schedule and the facility is not ready to receive them, the cars are held in the ACTA 1 siding which is two miles away; they are not held more than 48 hours.

• During the month of September, they received 11 ethanol unit trains totaling 814 cars, and currently have no trains holding in California.

Nu Star Energy is an energy provider in Selby, California that is currently receiving ethanol via unit-train delivered by the Union Pacific Railroad. NuStar Selby's rail service is back on-line, and in September received 1 train carrying 108 cars.

Storage of Hazardous Material Cars

<u>Arizona-California RR (ARZC)</u> is a short line railroad that was a subdivision of the Atchison, Topeka, and Santa Fe Railway. The ARZC began operations on May 9, 1991 and runs between Cadiz, California and Matthie, Arizona. A former branch line from Rice - Blythe - Ripley, CA. has

been shortened as a spur for freight car storage. The tracks at Rice are owned by the Arizona-California RR but leased by PBF Energy. PBF currently has in storage at the site zero empties and 189 loads.

Santa Maria Railroad: The Santa Maria Valley Railroad, serving the Santa Maria Valley's rail transportation needs since 1911 is located about 250 miles south of San Francisco and 175 miles north of Los Angeles on the Central Coast of California. The Santa Maria Railroad's system consists of 14 miles of main line track interchanging with the Union Pacific Railroad in Guadalupe. They currently have 35 loads and 114 empties. All storage cars are Liquefied Petroleum Gas (LPG), and the Santa Maria Railroad checks them for compliance prior to release.

<u>Sierra Northern Railway</u>: Sierra Northern Railway operates over 100 miles of track in Mendocino, Tuolumne, Stanislaus, and Yolo counties. Sierra Northern provides rail shipping to all of California through interchanges with the BNSF and UP. They are currently storing 121 loads and 267 empties at various locations on their railroad; all cars are LPG.

West Oakland Pacific Railroad: Formerly known as the Oakland Terminal Railway, operating on 10 miles of industrial track surrounding the Oakland Army Base. Jointly acquired in 1943 by the Western Pacific Railroad and Atchison, Topeka and Santa Fe Railway and used to interchange with the ATSF near the Southern Pacific 16th street station in Oakland. Currently storing 38 empties.

Northwestern Pacific Railroad is a regional railroad that serves the North Coast of California. Its main line is 271 miles long and runs between Schellville and Eureka. An additional portion of the line runs from the Ignacio Wye to the edge of San Rafael. Currently, only the 62 mi stretch between Schellville and Windsor is in operation with freight and Sonoma–Marin Area Rail Transit (SMART) commuter trains. Sierra Northern and Northwestern work together to store their cars if Sierra Northern runs out of track capacity Northwestern stores the excess. Currently NWP has 10 loads and 106 empties; all stored cars are LPG.



Crude Unit Train Cars