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**TO:** Board of Directors

**FROM:** Frank Castellon, Chief System Safety, Security and Compliance Officer

**SUBJECT:** System Safety and Compliance - Quarterly Update

**Issue**

Staff is providing a quarterly update on the Authority's safety and compliance status and activities, including strike data, reportable injuries, rule violations, compliance audits, regulatory inspections, and public outreach. This update covers the 4th quarter of Calendar Year (CY) 2022 and a summation of CY 2022.

**Recommendation**

Receive and file.

**Strategic Commitment**

This report aligns with the Strategic Business Plan commitment of:

- **Safety is Foundational:** We will stay on the leading edge by deploying new technologies and processes to enhance the safety and security of our riders, fellow employees, and the communities we serve. The Authority's System Safety, Security, and Compliance Department identify and works to mitigate existing and potential hazards in the system through oversight, compliance audits, training, public outreach, and statistical data analysis.

## **Background**

The Authority's mission is to provide safe, efficient, dependable, and on-time transportation service for the southern California region. The System Safety, Security, and Compliance (SSSC) Department work to optimize the agency's safety and promote a positive safety culture in the workplace through education, engineering, and enforcement, as well as auditing and inspecting for safety and regulatory compliance. Using a data-informed approach, the department utilizes leading and lagging data indicators coupled with management experience, research, and professional expertise to understand current trends and make decisions about the use of Agency resources in areas of focus.

Additionally, the SSSC Department tracks and evaluates inspections conducted by the Federal Railroad Administration (FRA) and other regulatory agencies. These inspections apply the general and permanent rules published in the Code of Federal Regulations (CFR), Transportation (Title 49 CFR Part 200-299) to oversee agency compliance and assess penalties for violations against freight and commuter railroad agencies. The FRA conducts inspections and audits agencies' records to monitor and enforce railroad safety regulations specified in Title 49 CFR. The Authority places paramount importance on safety and regulation compliance.

## **Discussion**

### **Systemwide Strikes**

In Quarter 4 (Q4) of CY2022, there were 17 total strikes systemwide. A decrease of 23% compared to Q4 of CY2021 when there were 22 strikes systemwide. A Q4 comparison breakdown of strikes by type is presented in Figure 1 (Attachment A). Overall, in CY2022, there were 98 strikes systemwide, a 56% increase compared to CY2021 when there were 63 total strikes systemwide. A CY2021/2022 breakdown of strikes by subdivision is presented in Figure 2 (Attachment A); a three-year comparison of total strikes in CY2020/2021/2022 is shown in Figure 3 (Attachment A). Although an increase occurred in Q1 & Q2, countermeasures employed in Q3 attributed to a downward trend (noted in attachment) through the end of Q4.

In 2022, SSSC staff partnered with the Operations Department, SCRRA contractors, LASD, and other agencies in a concerted effort to reduce the number of strikes on our system. Resources and efforts were directed at areas identified through data and trend analysis in locations with high trespasser strikes and trespasser occurrences in Q1 & Q2. Countermeasures employed included releasing a safety bulletin that raised awareness and requested the reporting of trespassers in a five-mile stretch on the Ventura Subdivision in Van Nuys milepost (MP) 450 – 455. The Safety Bulletin was directly attributed to an increase in reporting, from 138 in June to 501 reports in August. This information helped confirm assumptions of risk factors that may have increased strikes in an area recognized as the top location for strikes in Q1 & Q2.

In response to the increase in strikes and trespasser reports in Q1 and Q2, we refocused LASD efforts resulting in a rise in targeted enforcement in areas that, according to data trends, correlated to higher trespasser activity and strikes. LASD increased their right-of-way patrols,

registering 61,529 minutes in Q3 to 72,354 minutes by the end of Q4. Furthermore, at the beginning of Q4, LASD recorded an increase in trespasser arrests and written warnings issued. LASD has maintained these efforts, which can be attributed to the decrease in systemwide strikes. LASD's actions contributed to a 51% decrease in reported trespassers and a 20% decrease in trespasser strikes from Q3 to Q4. (attached KPI/ hot sheet). The reduction of trespasser strikes allowed for additional targeted law enforcement patrols, encampment clearance, outreach to homeless shelters and local businesses, and engineering strategies that deterred trespassing along the right-of-way and can be credited to the Q3 and Q4 net reduction in strikes and trespasser reports.

SCRRA Staff, based on data and location, focused on a collaborative cleanup and enforcement effort of a pedestrian bridge in Van Nuys. The bridge traversed over the railroad tracks and was reported to hold discarded materials and encampments. In addition to the debris and encampments on the bridge, staff compliance observations noted that local school students who had used this bridge to cross the tracks avoided the use of the bridge, causing them to trespass on our rights-of-way. Planning with stakeholders in Q4 led to a significant effort to clear the bridge and rights-of-ways. On December 13, 2022, a multi-agency cleanup effort led by SCRRA staff partnered with Los Angeles Police Department (LAPD), Los Angeles Sanitation, Los Angeles Homeless Services Authority (LAHSA), Los Angeles Sheriff's Department (LASD)-Metrolink, Union Pacific Railroad (UPRR), UPRR Police, City Net Outreach, Metro and Clean Harbor. These actions resulted in a 50% decrease in strikes, encampments near Van Nuys, and trespassers reported in the area during Q3 & Q4 compared to Q1 and Q2.

As an additional countermeasure to the increase in 2022 strikes and in an attempt to develop meaningful metrics to identify trends before a trespasser strike occurs, SCRRA staff have begun a pilot campaign. In Q1 2023, staff developed a site-risk analysis survey to use in identified areas with a high risk of trespassers and strikes. The risk analysis survey identifies elements that contribute to trespassing. These elements cover:

1. Source of water
2. Source of food
3. Shelter
4. Physical barriers
5. Signage
6. Area used as a short cuts
7. Area used for illegal activities
8. Track design: blind spots
9. High pedestrian and vehicle traffic
10. Local retail stores
11. Public assistance

Staff is currently piloting the risk analysis survey in four "areas of focus": Orange, San Gabriel, Ventura, and Valley subdivisions. Based on each area's risk ranking, we will strategically allocate our limited resources of the 3 E's of safety (Education, Engineering, and Enforcement) to these areas.

The SSSC Department outreach is also working on addressing the topic of deliberate acts on our system. Staff has developed frontline training to assist in being prepared if encountering a person in crisis. This effort will supplement the training provided in 2022 by one of the foremost industry experts on this topic, Patrick Sherry, Ph.D. National Center for Intermodal

Transportation and the University of Denver. In Q1 2023, frontline staff and contractors are being offered training on recognizing the warning signs and behaviors related to a person in crisis or suicidal. The training will include a suicide warning signs takeaway and a wallet card. The wallet card guides the employee through how to help by knowing what to do and what to say. Staff is also supporting the acquisition of suicide prevention signage at stations and on the right-of-way.

## **Rule Violations and Reportable Injuries**

Q4 of CY2022 saw an increase in rule violations compared to the same period in CY2021. Two violations were ROW protections on the Herzog Track maintainers, and two were attributed to Metrolink Dispatch, three violations were to Alstom, Amtrak, and Herzog Signal. Throughout all of CY2022, there were a total of 12 Rule Violations. A 20% increase compared to CY2021 when there were 10 Rule Violations. A graphical representation of CY2021 and CY2022 Rule Violations by group may be found in Figure 4 (Attachment B); a list of the types of Rule Violations for CY2022 is provided in Attachment B. As a result of the Root Cause Analysis findings, process improvements were added to the process redundancies to ensure issuing grade crossing protection orders was accurate. Another Root Cause Analysis finding identified the shunt verification process enacted in 2012 as working and protecting employees as designed. This process has ensured employees are working within their limits of authority before placing employees and equipment in the foul of the track.

In Quarter 4 of CY2022, there were 8 FRA reportable employee injuries, an 11% decrease from 9 injuries during the same period of CY2021. Two of the nine injuries were attributed to Alstom, and two were attributed to Amtrak; the remaining three were attributed to Herzog Signal, Allied Universal Security, and Los Angeles County Sheriff's Department – Metrolink Bureau. In CY2022, there were a total of 22 reportable employee injuries. A 27% decrease from CY2021, when there were 30 reportable injuries. While none of the reportable injuries have been catastrophic, management continues to work closely with contractors and contract managers to mitigate future occurrences. A graphical representation of CY2021 and CY2022 Reportable Injuries by group may be found (Attachment C). Compliance staff contributed to the effort to reduce injuries and rule violations by conducting safety inspections and audits for regulatory compliance on SCRRRA Departments and Operations Contractors. Between January 1, 2022, and December 31, 2022, the Compliance staff conducted 1284 Safety Inspections and 32 CFR 270 audits for regulatory compliance.

In addition to an increased presence and oversight, the System Safety Department conducts a Root Cause Analysis meeting following every suspected Rule Violation and when an employee injury is determined reportable to the FRA. The Root Cause Analysis meeting includes representatives from the departments directly responsible for contractor oversight and the contractor/employee involved. Meeting participants discuss the incident, identify the root cause, determine contributing factors, and discuss recommendations to avoid a similar event.

One of the Root Cause Analysis recommendations deployed in April of 2022 was the Amtrak/Metrolink job briefing form with a risk assessment requirement. This helped the employees identify and mitigate hazards prior to work. If unable to mitigate identified issues, they were to elevate it to a supervisor for assistance. The job briefing form with a risk assessment helped reduce injuries for Amtrak employees.

To address workplace injuries and rule violations, the SSSC Department conducted four quarterly Workplace Safety Campaign weeks in 2022 to increase employees' safety awareness and focus on maintaining a safe work environment. The Q4 campaign took place November 14-18, 2022, and centered around the following five key safety messages: How SMS Is Working at Metrolink, The Four Pillars of Safety Management System, Good Communication, Staying Focused and Limiting Distractions, and Understanding the Situation. Over the week, 1546 contacts in 210 face-to-face and virtual meetings with employees and contractors. During these meetings, contractors devised a more effective way of reporting mechanical issues for equipment, which will lead to a safer workplace and better on-time performance.

## **Regulatory Inspections**

In Quarter 4 of CY2022, the FRA and CPUC inspected the Authority 25 times, a 47% increase from the 17 inspections conducted during the same period in CY2021. In CY2022, there were a total of 69 inspections performed compared to 70 inspections performed in CY2021. There were a total of 25 defects noted in CY2022. A decrease of 57% when compared to the 58 defects noted in CY2021. Additionally, in CY2022, SCRRRA was issued one violation for a mechanical issue. Defects are items noted by the inspector where corrective action is required, but no fines are recommended. A summary of CY2021 and CY2022 inspections, defects, and violations is provided in figures 8, 9, and 10 (Attachment D).

Internal compliance inspections were conducted by SSSC staff, audit the Operations Department and Operations contractors to ensure compliance with federal and state regulations. In 2022, Compliance Officers performed audits on the following departments: Communications and Signal, Track, Facilities, Operations, Mechanical, and Safety. Over the year, Compliance assigned 338 corrective actions based on defects discovered through inspections. Of the 338, 323 have been completed and closed out.

## **Training**

The System Safety Department conducts training throughout the year for Authority employees, contractors, and outside law enforcement and fire agencies to increase safety awareness and assist in avoiding potential workplace and emergency response hazards. During the 4th quarter of CY2022, staff provided training classes on

- Active Shooter Preparedness
- General Code of Operating Rules (GCOR)
- Incident Response Plan (IRP)
- IndustrySafe Processes
- Passenger Train Emergency Preparedness
- Metrolink System Safety Program Plan (SSPP)
- Workplace Safety Lunch & Learn
- Train Dispatcher Manual
- Hazardous Materials Emergency Response

In all, 252 employees and contractors participated in training classes in Q4.

During Q4, Staff also provided external training for 47 law enforcement and first responders on Arrow Emergency Equipment Familiarization and conducted a 49 CFR 219 Emergency

## Simulation Drill.

During CY 2022, 1551 employees, contractors, law enforcement, and first responders participated in the training. The complete list of CY 2022 training courses is provided below.

- ARROW Emergency Equipment Familiarization
- 49 CFR 219 Emergency Simulation Drill
- Active Shooter Preparedness Training
- Dispatcher Road Trip - All Lines
- Drug & Alcohol Signs and Symptoms
- First Responder ARROW Equipment Familiarization
- General Code of Operating Rules (GCOR)
- Train Dispatchers Manual (TDM)
- Hazardous Materials Emergency Response Guide
- Incident Response Plan (IRP) Training
- Incident Response Training
- IndustrySafe Processes
- Passenger Train Emergency Preparedness (PTEPP)
- Workplace Safety Campaign Lunch and Learn
- Facilities Personnel On-Track Protection

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### **Attachment(s)**

[Presentation - System Safety and Compliance - Quarterly Update](#)