Suicide Prevention Initiatives

Joint Powers Board (JPB) Meeting
December 1, 2022
Overview

- Statistics, Trends, and Risk Factors
- 3 E’s of Rail Safety
  - Engineering
  - Enforcement
  - Education – Community Engagement
- Caltrain Initiatives
Statistics, Trends, and Risk Factors
National Suicide Statistics

- 48,000 – 4% increase in 2021 after 2 years of decline (historical YOY increase)
- Overall, the 11\textsuperscript{th} leading cause of death (varies by age group)
- Males 4X that of Females
- 98% are Firearms, Suffocation, Poisoning, Cutting and Falling
- Suicide by Train represents <1%

Centers for Disease Control Data
FRA Trespasser Data Analysis

- Approximately 70% of all rail transit fatalities in the United States are the result of trespassing and suicides on ROW.
- 74% of trespassing casualties (fatalities and injuries) occur within 1,000 feet of an at grade crossing.
- 5% casualties occur in Stations, yards and tunnels.
- 82% of trespassers are male, and most are of low socioeconomic status.
- 96% of freight rail suicide incidents occur on areas of track that do not have a barrier to restrict ROW access.
## Caltrain Trespasser Strikes 2018-2022

<table>
<thead>
<tr>
<th>Year</th>
<th>Trespasser Strikes</th>
<th>Fatalities</th>
<th>Suicide*</th>
<th>Unintended*</th>
<th>Pending</th>
</tr>
</thead>
<tbody>
<tr>
<td>2022 YTD</td>
<td>16</td>
<td>10</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>2021</td>
<td>13</td>
<td>9</td>
<td>8</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>2020</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>22</td>
<td>16</td>
<td>10</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>16</td>
<td>13</td>
<td>7</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

* Coroner and Law Enforcement determine cause
Caltrain Trespasser Strike Analysis

- No clear trend as to specific location
- No clear trend as to time of day or year
- Align with FRA data
- <10% occur at Stations
- Most are intentional
Engineering
Engineering:

- State of Good Repair
  - Track maintenance, fencing, barriers
- Capital Improvement Projects
  - New station: Hillsdale
  - Improved station: SSF
- Electrification
- Technology
  - Grade crossings
  - Motion detection systems
  - Video analytics
Caltrain has an ongoing fencing program, the goal of which is to strategically close off pedestrian access to the right-of-way.

Priorities developing from train engineers, Transit Police, right-of-way maintenance workers, local public works and safety departments, and general concerns raised by the public.

Repairs of existing fencing are performed regularly.

Inspections performed regularly.
• Over the last 10 years, Caltrain has installed over 8.5 miles of new Right of Way (ROW) fencing.
• Goal is to fence off the entire ROW (52 miles x 2 = 104 miles)
• 86% (~90 miles) of our ROW has fencing or a barrier.
• Multiple locations cannot support fence installation:
  ○ Tunnels, bridges, stations, etc.
SOGR – Fencing and Barriers

- Fencing repairs are continuous due to vandalism, vehicular accidents adjacent to our property and construction.

- Fence inspections are included with monthly hi rail inspections performed by Caltrain/TASI
  - The entire ROW is inspected biweekly by hi rail, on foot or on passenger trains.
SOGR – Fencing and Barriers

- Caltrain plans to award a new ROW fencing contract in January 2023 for a 2-year period.

- Suicide Prevention and No Trespassing Signage are placed every 528 feet along the 52-mile corridor.

- California Public Utilities Commission (CPUC) 26D prohibits barriers within 8’6” on tangent & 9’6” on curve tracks.
Technology Improvements

- Platform screens ($100’s of millions - $Billions if feasible)
  - Solution only for closed systems
  - Not proven to be effective on an open system
- Grade crossing (GC) design, lights, wayside horns, etc. (TBD)
- CCTV / Analytics @GC’s/stations/yards (≈$7M-$10M)
- Motion/proximity detection systems @GC’s (≈$3M-$5M)
- See Something Say Something Apps ($10,000 -$20,000)
Technology Mitigation Strategies

- According to FTA Research, major strategies and associated countermeasures to detect and prevent trespassing on rail transit ROWs include:
  - Detection and Monitoring - Implement technology-based detection and monitoring along railroad ROW, train stations, or near railroad grade crossings to overcome some human limitations of in-person monitoring.
  - Platform Edge Doors (also referred to as “Platform Screen Doors”) – Install platform edge doors to significantly reduce suicide attempts at train stations.
  - Blue Lights at Train Stations – Consider installing blue lights at train stations to potentially deter suicidal thoughts. The effectiveness of blue lights is not proven. Evidence showing the effectiveness of blue lights is based upon a Japanese study that has not been replicated.
Enforcement
Enforcement:

- Transit Police
  - San Mateo County Sheriff's Department
- Specialized Training
  - Crisis Interventions
- Emergency Response Team
  - Proactive outreach
Crisis Intervention Training (CIT)

- 40-hour training provided to all Transit PD Deputies and Supervisors
- Provides foundational mental health awareness and understanding on a range of topics:
  1. Common types of mental illness
  2. Assessment of medication information
  3. Skills for de-escalation of potentially violent situations
  4. Specific strategies for suicide intervention
- Transit PD (Sherriff’s Office) is currently in the process of providing their Deputies and Supervisors with Enhanced Crisis Intervention Training (ECIT)
  o While CIT focuses on mental health awareness and ability to recognize potential behavioral health concerns, ECIT deals with the operational aspect of specific crisis scenarios
Psychiatric Emergency Response Team

- Established by the Sherriff’s office to review all Transit PD cases involving potential mental illness
- PERT units consist of one Sherriff’s Detective and one Licensed Mental Health Professional from Behavioral Health and Recovery Services
- PERT conducts follow-up investigation when necessary, with the goal of connecting patients and families with services and resources that can:
  - Help manage acute crisis
  - Prevent tragic outcomes
  - Reduce hospitalizations and incarcerations
- PERT functions as the homeless liaison for the Sherriff’s Office and conducts regular outreach to the San Mateo County homeless population
Trespassing and Intrusion Programs

- Transit Police focus on dangerous behavior such as walking on tracks, cutting through and/or crawling through holes in fences and walking on bridges and in tunnels.
- Signs prohibiting trespassing are posted at least every 600 feet along the Caltrain right-of-way. Transit Police use these signs to educate potential trespassers and issue citations for violations.
- To address a multi-lingual community, the signs display a pictorial of a person crossing railroad tracks with a standard red circle and slash through the picture. In addition, they show large warning messages of “No Trespassing” and “Active Railroad.”
- Signs are painted on both sides with anti-graffiti paint and are double-bolted to posts secured two and a half feet in concrete.
Trespassing and Intrusion Programs

- All Rail Operations employees are trained to report any trespasser on Caltrain’s Right of Way (ROW).
- Train crews are also instructed to report holes in the ROW fencing.
- The reporting process for any observed ROW safety concerns is as follows:
  - Train crew makes radio call to Central Control Facility (CCF) dispatcher
  - CCF dispatcher notifies Transit Police
  - Transit Police instruct trains to slow down until officers clear the area
  - Once trespasser leaves or is removed by police, trains can resume speed
  - Engineering is notified to repair any observed holes in the fencing
See Something, Say Something

Do your part to keep the rails safe! **Call Transit Police at 1.877.SAF.RAIL (1.877.723.725) immediately** to report any unsafe situation or suspicious activity, such as children playing near the tracks or people hanging out along the right of way.

Save the number in your cell phone for quick and easy access.
Community Engagement - Education

Tasha Bartholomew, Manager, Communications
Partnership with Operation Lifesaver

- Since the 1990s
- Annual contributor to CAOL
- Staff serves on OLI National Advisory Council (NAC)
- NAC meets twice a year - creates educational projects with FRA and FTA funding
- Helps develop and edit all rail safety outreach materials used nationwide through OLI's Materials Review Committee
Education:

- Don’t Shortcut Life Rail Safety Education Program
- Free presentations to communities
- Open to all ages
- In person or virtual
The Importance of Messaging

• Communicating as an Agency
  o Rail Safety

• 2009 Palo Alto Suicides
  o Changed our Way of Thinking

• Addressing the Issue
  o Mental & Behavioral Health Organizations
Key Partnerships
Crisis Text Line

Help is just a text away

Text BAY to 741741
Free, 24/7, confidential crisis support by text

Caltrain has formed a new partnership with Crisis Text Line, a service that offers free, 24/7 anonymous counseling for individuals who may be depressed, having suicidal thoughts or suffering from a mental disorder.

Here's How it Works:
1) A person in crisis should text the word BAY to 741741.
2) A trained crisis counselor receives the text and responds quickly.
3) The crisis counselor helps the individual stay cool, calm, safe and healthy by using effective active listening and suggested referrals—all through text messages on the line’s secure platform. The goal response time is five minutes.
Public Service Announcements

Onboard / Station rail safety blitz

Suicide prevention training for staff

Installed 250 suicide prevention signs at stations


Raised over several years, $25,000 for American Foundation for Suicide Prevention’s Out of the Darkness Walks

Sponsored the Caminar for Mental Health Symposium

Sponsored “Edge of Success” Film Festival

Media Roundtable
Recap and Next Steps
# Successful Strategies at Peer Agencies

The FTA, through 11 case studies, has identified several strategies and associated countermeasures that have either yielded positive outcomes or showed a potential for mitigating suicide and trespasser incidents, inquiries, and fatalities.

<table>
<thead>
<tr>
<th>Effective or Promising Practices</th>
<th>Strategy Deployed by Caltrain?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fencing rail transit ROW to reduce trespassing incidents, especially at hot spot locations and areas of serious concern.</td>
<td>Yes. Caltrain has an ongoing fencing program to both install new fence and regularly inspect and repair existing fencing.</td>
</tr>
<tr>
<td>Conducting community educational outreach activities via collaboration with Operation Lifesaver, rail safety campaigns such as Respect the Train, and targeted campaigns to vulnerable populations.</td>
<td>Yes. Caltrain has a longstanding partnership with Operation Lifesaver and sponsors targeted campaigns throughout the year in coordination with public health groups.</td>
</tr>
<tr>
<td>Training rail transit operators and employees how to properly handle various trespassing scenarios.</td>
<td>Yes. TASI employees, and specifically all train crews, are trained on how to report and resolve trespassing scenarios.</td>
</tr>
<tr>
<td>Deploying smartphone apps such as See Say and Transit Watch app (ELERTS Corp) and encouraging passengers to install and utilize the apps to report trespassing or suspicious activities.</td>
<td>Not currently. However, Caltrain does support a Crisis Text Line and instructs members of the public to call Transit Police to report any unsafe situation or suspicious activity.</td>
</tr>
<tr>
<td>Rail transit police or local law enforcement agency response to report trespassing and patrolling to reduce trespassing incidents.</td>
<td>Yes. Transit Police focus on dangerous behavior such as walking on tracks, cutting through and/or crawling through holes in fences and walking on bridges and in tunnels.</td>
</tr>
<tr>
<td>Installing flashing lights or audible alerts at train stations to indicate train arrival and warn passengers.</td>
<td>Yes. Caltrain stations include flashing lights, visual message signs, and audio announcements about approaching trains.</td>
</tr>
<tr>
<td>Employing technology applications such as drones and ROW intrusion detection systems to detect trespassers.</td>
<td>No. Caltrain has not pursued any of these emerging technologies to date, and the cost feasibility is unknown.</td>
</tr>
</tbody>
</table>
Next Steps

• Refresh suicide prevention signs
• Pilot grade crossings
• Potential mobile app
• Continue partnerships with Operation Lifesaver and local health and safety departments

Suicide prevention and safety program is contingent on the availability of funding.