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Transportation

**Federal Railroad
Administration**

Railroad Implemented Countermeasures to Prevent Suicide: Review of Public Information

Office of Research,
Development
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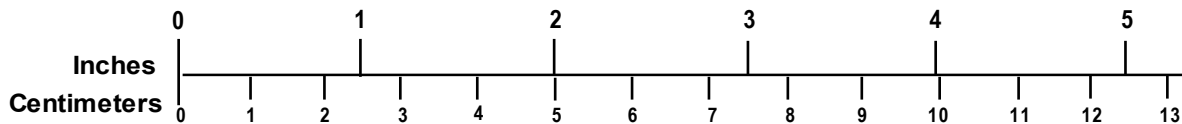
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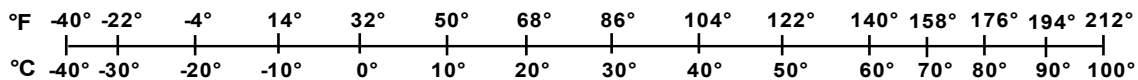
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Executive Summary

Suicide is a sensitive and challenging topic that impacts individuals, families and organizations every day, yet there is often silence surrounding the subject of suicide. Likewise, within the rail industry, the topic of suicide and how the industry may help mitigate its occurrence is not widely discussed.

One of the priority areas identified by the experts of the National Action Alliance for Suicide Prevention to help reduce the number of suicides occurring in the U.S. is to change the conversation about suicide so that it can be discussed more openly without fear of negative consequences. The railroad industry can participate in making this change a reality by providing public information, in a responsible way, about their efforts to prevent suicide. Rail carriers often provide public information about other types of safety initiatives, which benefits both the carriers and the public. Of course, talking about suicide or suicide prevention should be done thoughtfully, and rail carriers may need to educate themselves about how best to approach what can be seen as a difficult subject to discuss. Understanding how to talk about these issues can help to realize the benefits of a more public discussion.

The purpose of this report is to document and summarize a sample of suicide prevention efforts undertaken by U.S. rail carriers. Researchers conducted web-based searches, performed between May and October of 2018, for publicly available information about suicide mitigations being implemented by railroad carriers. Specifically, we focus only on aspects of these efforts that have been made public either by the carriers themselves, or through the media. This report is not intended to provide a complete review of all available options for mitigating suicide on a rail system. Rather, this report will provide rail carriers with an overview of efforts that other carriers are implementing and publicly discussing. The carriers included in this effort were both Federal Railroad Administration (FRA) and Federal Transit Administration (FTA) regulated railroad properties.

Key findings include:

- In total, 14 carriers used a range of suicide prevention strategies, including fencing, signage, detection and monitoring, training of employees and authorities, public and industry events, websites, and media guidelines.
- The strategy discussed most often was partnering with a national or local suicide prevention helpline (12 carriers), followed by training of railroad employees and authorities (6 carriers). The remaining countermeasures were not found to be widely discussed publicly.
- Some carriers tend to be more transparent regarding suicide prevention efforts than others. For example some carriers regularly post information and press releases directly on their websites, while others never address suicide prevention directly on their websites.
- For the public information obtained from media sources, it cannot be determined, through this effort alone, if these media articles were written in coordination with the carriers or written without carrier involvement.

- Thirteen carriers included in this effort have information on at least one of their suicide prevention efforts posted on their website directly or in online documentation (e.g., quarterly report). Most discussed partnering with a national or local suicide prevention helpline. Only a few discussed employee training and other public or industry events.
- In some cases, media articles include accident/incident data as an impetus for carriers launching suicide prevention efforts. Occasionally data is provided that reflects the number of casualties occurring after implementation of a mitigation. However, it is important to emphasize that it is often impossible to support a direct causal relationship due to the many other factors that can affect accident and incident rates.
- While some articles note the impact of rail suicides on safety and service, relatively few articles noted the grave impact of these events on train crews.

This report is organized into two main sections: Countermeasures and Discussion. The Countermeasures section lists different countermeasure implementations that the research team found, each in a separate subsection.

The Discussion section summarizes the implications of the efforts detailed in the Countermeasures section and includes potential next steps.

1. Introduction

1.1 Background

Suicide is a sensitive and challenging topic that impacts individuals, families, and organizations every day. Yet, there is often silence regarding the topic of suicide.

The National Action Alliance for Suicide Prevention¹ (Action Alliance) launched on World Suicide Prevention Day (September 10) in 2010. It is a public-private partnership of dedicated individuals whose goal is to reduce the suicide rate in the United States (U.S.) 20 percent by 2025. The Action Alliance identified three priority areas that will be vital to achieving this goal: transforming health systems, transforming communities, and changing the conversation about suicide. With respect to changing the conversation about suicide, the Action Alliance states, “To prevent suicide, we need to be able to talk about it openly—without fear or shame. But how we talk about suicide matters.” While experts in the prevention of suicide understand the importance of communication about suicide, however, change requires the participation of individuals, organizations, industries, and society as a whole.

Every year in the U.S. over a thousand people lose their life on railroad and rail transit systems. In addition to those lost lives, these incidents can result in lasting trauma to train crews who witness or are called to the scene of these incidents. Each incident also may cause multiple hours of delay, resulting in unhappy passengers, lost revenue, and delayed shipments. The vast majority of these fatalities are from highway-rail grade crossing, trespass, and suicide incidents.

Historically, rail carriers have focused public safety efforts on grade crossing safety and trespass prevention (in addition to maintenance-based safety efforts). While these have been, and still are, important safety risks to address, the topic of suicide is often overlooked despite being the second leading cause of death on the U.S. rail system.

Grade crossing safety blitzes or safety enhancements are often discussed publicly by rail carriers or railroad regulators, perhaps to help share with the public the effort being put into trying to keep them safe. Similarly, rail carrier efforts to prevent trespass or to educate about trespass danger are also often publicly discussed. Operation Lifesaver, a non-profit organization that provides public education about railroad safety, are a tremendous resource for increasing awareness of grade crossing safety and trespass prevention.

Generating responsible conversation about suicide is a priority to achieve success in reducing frequency. Discussion of railroad safety initiatives can help the general public to act more safely, and also help the public to understand how the rail carriers are trying to improve safety.

If one rail carrier actively promotes their safety initiatives, it has the potential to encourage other carriers to similarly invest in such efforts. Additionally, rail carriers can learn from one another through a public discussion of successes and challenges. Carriers struggling to curtail a safety concern may discover new strategies through other rail carriers’ websites or through the discussion of these initiatives in the media. A lack of public discussion of safety initiatives can hinder some of these benefits listed above. Carriers experiencing similar issues may miss

¹ [National Action Alliance for Suicide Prevention website](#)

important opportunities to work collaboratively and share insight about how to address their concerns.

Suicide is one of the more quietly addressed rail safety issues. While many carriers are actively addressing rail suicide, the specific efforts are often not discussed publicly, or are not discussed to the same extent as other rail safety initiatives.

Carriers' lack of publicity surrounding suicide prevention efforts is by design in some cases. Rail carriers may be concerned that speaking about suicide may inadvertently advertise their system as a potential means for suicide. While there is no evidence that public discussion of suicide will *cause* people to become suicidal, it is reasonable to carefully consider how the publicity of these initiatives may be interpreted by members of the public who are already experiencing suicidal thoughts or are otherwise vulnerable. One of the main concerns is that if the public *only* see suicide prevention messages being presented in a railroad setting, then suicide may become associated with the railway.

The reluctance to discuss suicide publicly may limit the potential for rail carriers to learn from one another about effective strategies for mitigation. Some rail carriers have been more reluctant than others to publicly discuss their initiatives. In some cases, carriers may have been approached by the media or felt pressured by recent incidents and decided to discuss what they have been doing to prevent additional incidents. In other cases, carriers may have developed a strategy that they felt was a responsible way to approach the topic publicly, for example to frame the carrier as a partner in improving mental health awareness generally, rather than as addressing a rail suicide specifically.

The authors of this paper hope that by sharing some of the information made public by various rail carriers, the FRA may help encourage more carriers to consider openly discussing their initiatives. Additionally, it may help to start a needed conversation about how to responsibly discuss these initiatives publicly in a way that will increase knowledge of these efforts without a risk of linking the rail system to suicide.

The rail and rail transit industry face the same battle that the broader suicide prevention community faces. Talking about suicide prevention is a critical component to reducing the suicide rate; however, irresponsible discussion of suicide has the potential to have the opposite effect, potentially encouraging imitative suicide acts. As the suicide prevention community and railroad industry work simultaneously to identify how to publicly discuss this important safety topic responsibly, they may be able to learn from each other in order to address this issue effectively.

1.2 Objectives

The purpose of this report is to document and summarize a sample of suicide prevention efforts that have been undertaken by U.S. rail carriers. Specifically, we focus on aspects of these efforts that have been made public either by the carriers themselves, or through the media.

1.3 Overall Approach

The research team conducted web-based searches between May and October 2018, to identify any publicly available information regarding suicide prevention activities that involve a rail carrier. Initial searches were generic, seeking out any rail-based suicide prevention efforts. As

efforts were identified, the research team used language from these efforts to search for additional carriers implementing similar strategies. The research team also searched for specific railroad carrier names along with suicide prevention terms to collect both articles written about a carrier-specific effort and information provided by the carrier on their website.

Note that this method of collecting information is not intended to provide an exhaustive list of all available carrier efforts to mitigate suicide. Rather, this strategy is intended to uncover efforts that can be found with relative ease through web searches.

1.4 Scope

The findings documented in this report are limited to only publicly available information. That information may be directly from a rail carrier (e.g., from their website) or from an online media outlet reporting on a specific carrier's effort. This report is not intended to provide a complete review of all available options for mitigating suicide on a rail system. Rather, this report will provide rail carriers with an overview of efforts that other carriers are implementing and publicly discussing. The carriers included in this effort include both the Federal Railroad Administration (FRA) and Federal Transit Administration (FTA) regulated railroad properties.

1.5 Organization of the Report

This report is organized into two main sections: Countermeasures and Discussion. Countermeasures, found in [Section 2](#) lists different countermeasure implementations that the research team found, each in a separate subsection. The Discussion, found in [Section Error! Reference source not found.](#), summarizes the implications of the efforts that were detailed in the Countermeasures section, and includes potential next steps.

2. Countermeasures

Rail carriers have a variety of strategies that they may choose to employ to reduce the likelihood of a suicide casualty on their system. This section discusses several countermeasure implementations that have been made public by rail carriers.

The impetus for initiating a suicide prevention effort is often the far-reaching repercussions that occur after these incidents, including rail service and financial impacts, emotional impacts on the rail employees and witnesses, severe injury, and loss of life. Suicide prevention efforts may take on a wide variety of forms. Some mitigation strategies are engineering-based, physically restricting access to the rail system through the installation of equipment. Other strategies address the issue further upstream, by helping riders to seek help to improve their mental health. In some cases, the chosen strategy is to partner with other local or national groups who can provide expertise in mitigating suicide.

Mitigating suicide will not be possible with a one-size-fits all solution. Rather, the most effective strategy for a rail carrier to implement will depend on the various characteristics of the particular issue that they are facing. The sub-sections below are not an exhaustive list of efforts that rail carriers have undertaken to mitigate suicide, but are intended to describe the countermeasures that have been publicly discussed by, or in reference to, at least one rail carrier in the U.S.

2.1 Fencing

Fencing is often used as a means to directly restrict access to railroad rights-of-way. Different types of fencing may be used to prevent access to the right-of-way. A description of the following types of fencing can be found at the Federal Highway Administration (FHWA) website:²

- Type I: Picket Fence – For use where trespassing is not much of a problem. It serves as a reminder to stay off the tracks.
- Type II: Post and Cable – For use where trespassing is not much of a problem. It demarcates railroad property, but does not offer anti-trespassing features.
- Type III: Chain-Link – For keeping unauthorized personnel off the tracks at relatively low cost. May not be appropriate for rural areas with no history of trespassing or for areas with high trespassing rates since it is very easy to cut and vandalize.
- Type-IV: Vinyl-Coated Chain-Link – Similar to Type III, but with plastic or wood battens woven into the chain-link providing additional wind and visual buffering.
- Type-V: Israeli-Style Steel Fence – For use when aesthetics or wind and visual buffering are not needed. This fencing is more expensive than chain-link, but is difficult to vandalize and climb. It is also relatively easy to repair if cut.

² Description of different types of fencing by the [Federal Highway Administration](#).

- Type-VI: Wrought Iron Picket Fence – For use where there is a history of trespassing. Virtually impossible to cut and difficult to climb. There is a high initial cost, but this type of fencing is vandal-resistant, so maintenance costs are likely lower.

Two rail carriers recently discussed the implementation of fencing: Caltrain in the city of Palo Alto, CA, and SunRail in the Orange and Seminole counties of Florida.

Caltrain (California)

According to a 2015 community forum held in Palo Alto, fencing along railroad tracks in the community was 3-foot high, which was thought to be “substandard” as a barrier to prevent trespassers from entering the right-of-way. In July 2017, the city of Palo Alto partnered with Caltrain and formed an agreement to install an 8-foot fence with 18-inch cable winglets in order to better restrict access to the train tracks. The effort also included the removal of vegetation to provide the necessary access to install the fencing. The overall cost was estimated at \$150,000 (City of Palo Alto, 2017).

Sun Rail (Florida)

In 2017, the Florida Department of Transportation (FDOT) and SunRail announced that 6-foot fencing will be installed along 2 miles of track in areas with high pedestrian traffic (Williams, 2017). According to FDOT officials, the surveying of land in Orange and Seminole counties was completed in spring 2018, with construction expected to begin soon after. Similarly to the fencing in Palo Alto, vegetation removal was required before the installation could be completed. The project was expected to be completed in July 2018, and has an estimated cost of \$235,000 (Castro, 2018).

Summary

Fencing can be expensive depending upon the materials used and the length of track, and as such, it is generally placed in areas with a known trespass issue to maximize the cost-benefit. However, fencing is prone to vandalism in order to reopen the illegal path across the tracks. Some types of fencing are more vulnerable to vandalism than others, for example, chain link is easier to cut than steel or iron.

Other methods to restrict access to the railroad rights-of-way exist beyond fencing. For example, rail carriers may use vegetation or other natural barriers to make it challenging to access the right-of-way in certain areas. Vegetation with thorns or barbs, or very dense vegetation, may be particularly effective at preventing unauthorized access. Another strategy is to make the grade of the land steep on one or both sides of the track, making it more challenging to walk along or across the right-of-way. There were no specific mentions of these types of means restriction being publicly promoted, though they are known to be used by some carriers.

2.2 Signage and Digital Displays

While fencing aims to limit access to a lethal means for suicide, other strategies may seek to address more upstream issues, such as an individuals’ ideation about suicide. A passenger railroad station or commonly traversed legal crossings may provide an opportunity to reach large segments of the population, some of whom may be in severe distress or considering suicide. For

example, presenting signage advertising local helpline services may prompt individuals in need to seek help before they reach a point where suicidal ideation turns into physical action.

Railroads may choose to partner with national and/or local suicide prevention helplines to post signage along their tracks and stations, which typically includes a hotline number and website information. This strategy also depends on individuals having access to a phone line, which limits its helpfulness for certain individuals such as the homeless, or those who left their cell phones behind.

2.2.1 Partnering with a National Suicide Prevention Helpline

Caltrain (California)

Many rail carriers have chosen to partner with national suicide prevention helplines. The earliest partnership identified in this effort involved Caltrain, who began partnering with the National Suicide Prevention Hotline in 2001 (Terrazas, 2011). At that time, signage included the message, “There is help,” along with a phone number to reach the national helpline.

In 2016, Caltrain announced a partnership with a national nonprofit, Crisis Text Line, to provide free, anonymous assistance for those in need through text messaging. The text line is staffed by volunteers trained to support callers, provide information on local resources, and provide referrals when needed. If an individual is at imminent risk for suicide, the situation is escalated to a mental health counselor and local police to provide in-person assistance (Kadvany, 2016). As of December 5, 2016, over 250 signs were posted along 50 miles of track, and include a telephone number for a crisis prevention center and a message that help is available (San Mateo County Roadmap, n.d.). As with many of the signage mitigation efforts, information pertaining to the cost of the campaign or its outcomes were not provided in the publicly available resources.

Long Island Rail Road (New York)

In 2009, the Long Island Rail Road (LIRR) partnered with the Long Island Crisis Center to initiate a signage campaign. In 2008, a Long Island Crisis Center volunteer initiated the partnership with LIRR after meeting a suicidal individual while waiting for a train on a station platform. By July 2009, LIRR had posted signage at 124 stations that include a suicide helpline number and the message, “Suicide is not the route.” The hotline connects callers with two suicide prevention agencies: The Long Island Crisis Center, and Response of Suffolk County (Castillo, 2009).

Southeastern Pennsylvania Transportation Authority (Pennsylvania)

In September 2014, the Southeastern Pennsylvania Transportation Authority (SEPTA) conducted a pilot program in partnership with the Montgomery County Emergency Service, Inc. (MCES), a local nonprofit that is part of the National Suicide Prevention Lifeline’s network of response centers. The pilot program included a signage campaign that presented the National Suicide Prevention Lifeline number. SEPTA initially installed signs at the Manayunk/Norristown Line passenger boarding areas, and planned to continue to place signs at various locations through 2015 in areas where suicides and attempted suicides occurred (Miller, 2014). This was the first of several partnerships between MCES and local railroads.

The Port Authority Transit Corporation (Pennsylvania and New Jersey)

The Port Authority Transit Corporation (PATCO), which covers both Philadelphia and New Jersey areas, also partnered with MCES in 2017. Signs providing the Suicide Prevention Lifeline number were posted in July 2017 in several locations in Pennsylvania, including Bucks, Chester, Montgomery, and Philadelphia counties, and in several New Jersey counties, including Trenton, Newark and Wilmington. According to the MCES website, MCES received “many calls from people at the stations” who were considering suicide following implementation of the signage. The MCES website also notes that Amtrak partnered with the nonprofit in 2017, and placed National Suicide Prevention Lifeline signs across several other States, but the names of those locations are not provided.

Bay Area Rapid Transit (California)

In 2015, the San Francisco Bay Area Rapid Transit (BART) partnered with the National Suicide Prevention Lifeline to implement a signage campaign, and used the same message previously tested by LIRR, “Suicide is not the route.” The campaign was initiated after incidents rose from 6 in 2013, to 14 in 2014 (BART, 2015). According to the latest data from the 2018 BART Annual Report, the helpline received 20 to 50 calls per year since the campaign began. A reduction in suicides was also documented from 14 in 2014 to 6 in 2016. Note, although a reduction in suicides is the ultimate goal, it cannot be determined whether the reduction is a direct result of this specific mitigation.

Northeast Illinois Regional Commuter Railroad [Metra]³ (Illinois)

In 2016, Metra partnered with the Rotary Club of Naperville Sunrise to implement suicide prevention signage at the Metra station in downtown Naperville. The signs included the number to the National Suicide Prevention Lifeline, however, additional details were not provided on this effort (Bookwalter, 2016).

In spring 2018, Metra planned to install signs along its tracks with the message, “If you need to talk, we're here to listen. Let us help,” along with phone and text numbers for the National Suicide Prevention Lifeline (Wronski, 2018).

Union Pacific Railroad (Illinois)

In February 2018, the Union Pacific Railroad (UP) posted suicide prevention signs along Metra's UP Northwest Line on both interior and exterior walls near the tracks displaying the message, “You are not alone. Make the call,” along with the National Suicide Prevention Lifeline number with a picture of a sunrise. Although UP posted the signs, the signage itself was paid for by the rotary clubs (Susnjara, 2018). According to the article, members of the clubs spearheaded the campaign after another local rotary club that collaborated with Metra's BNSF Railway (BNSF) and the National Suicide Prevention Lifeline in 2016. Later, in September 2018, Metra planned to post signs along the platforms of all 11 of its lines that stated, “You are not alone,” and displayed a helpline number (Bellware, 2018). The name of the specific helpline was not provided in the article.

³ Referred to as Metra, from this point forward.

Summary

Passenger railroads often service many people in a limited geographic area from various backgrounds and socioeconomic statuses, which presents an opportunity for the rail industry to help people who may be considering suicide. This situation makes it possible to reach a large number of people and provide information about how to seek help to address potential suicidal thoughts. The National Suicide Prevention Lifeline is one avenue by which these individuals may seek to address these issues, and advertising these services in stations or along the right-of-way is one way to make these services known to many people. The Lifeline's staff are trained and proven to be able to help those who reach out.

One challenge with using a national number is that it can be difficult to track how often the number was called because of a sign in the railroad setting. While this information is unimportant for providing assistance to any given individual (all that matters is that they reached out and received help), this makes studying the impact of this type of effort challenging. Additionally, many of the individuals who call a helpline may do so far in advance of acting on suicidal thoughts, but rather to help with an ongoing mental health issue. Assistance from these services may be preventing suicides that would have occurred years later, thus making short term evaluations of impact especially challenging.

2.2.2 Partnering with a Local Suicide Prevention Helpline

Several rail carriers have partnered with local suicide prevention helplines, some in addition to their partnership with a national helpline.

Washington Metropolitan Area Transit Authority (Washington, DC)

The Washington Metropolitan Area Transit Authority (WMATA) partnered with the Washington DC, Department of Mental Health in March 2012, and initiated a signage campaign displaying the DC Crisis Hotline number (WMATA, 2012a). The signage states "You talk, we listen. Together we survive." As of October, 2012, WMATA had 100 signs in trains, several buses, and in 13 stations at the end of the platforms. The carrier planned to add signs to the remaining 73 stations through the end of 2012. According to the DC Department of Mental Health, the hotline received 100 calls since its launch in August 2012. The suicide prevention program was initially planned in September 2009, however, the program was delayed for approximately 3 years. The budget for the suicide prevention program, including the signage campaign, was \$250,000 (Weir, 2012).

Metrolink (California)

In 2012, the Los Angeles (LA) area Metrolink experienced a spike in the number of suicides, which led transportation officials to implement a suicide prevention campaign (Aguilar, 2014). In March 2013, the LA County Metropolitan Transportation Authority (also known as LA Metro) and Metrolink partnered with their local Didi Hirsch Mental Health Services. The campaign initially included 60 signs posted along the Blue Line tracks from downtown Los Angeles to Long Beach. This area was chosen due to the increased number of suicides that occurred along the line since its opening in 1990 (Scauzillo, 2014). It is also one of the busiest light rail lines in the U.S., with approximately 30 million passengers per year (Sherry, 2016). The

signs included the message, “Need help? Feeling hopeless? Call the suicide prevention hotline at 877-727-4747” (Scauzillo, 2014).

The campaign was expanded in November 2014, when Metrolink installed posters at several stations with both national and local suicide prevention helpline numbers, along with the message, “Reach out. There is help.” In terms of outcome, the Didi Hirsch Crisis Line reported assisting 130 individuals who saw the signage. Additionally, prior to the campaign launch, Metrolink was involved in 19 suicides in 2012, and only 4 in 2014 (Lemon, 2014). Although this information is encouraging, it is impossible to determine whether this decrease was directly due to the signage, as there are several other factors that may also have contributed to the reduction in suicides, including participation in other mitigation efforts.

New Jersey Transit (New Jersey)

New Jersey Transit (NJT) also partnered with a local suicide prevention helpline. In 2013, NJT partnered with the New Jersey Hopeline, run by the University of Medicine and Dentistry of New Jersey. Signage was posted at 164 stations with the message, "Suicide is NOT the answer." As part of the suicide prevention effort, the New Jersey Department of Human Services also developed a flyer with the same message (NJ Transit News, 2013) (Mueller, 2013).

Caltrain (California)

Caltrain has been partnering with both national and local suicide prevention helplines for almost a decade. As part of a 2010 effort, Caltrain invested \$110,000 into a suicide prevention signage campaign, and installed 250 signs along 10 miles of track between Menlo Park and Mountain View. The signs were placed at a maximum of 528 feet apart on fences, gates, station platforms, and at grade crossings. The signs displayed the phone number to the local Youth and Family Services Crisis Intervention and Prevention Center in San Carlos, and included the message, "There is help."

Caltrain also posted "No Trespassing" signs nearby with phone numbers to report unauthorized individuals on the tracks. Older suicide prevention signs near the tracks used letters and words to spell the hotline number, which Caltrain officials believed was not effective on newer phones. Newer signs use numbers instead of letters (Sarwari, 2010).

Later, in 2016, Caltrain partnered with the County of San Mateo Health System to launch a new signage campaign. According to the *San Mateo County Suicide Prevention Roadmap 2017-2020*, signs were posted on trains and other places, including on buses, social media, and radio stations (San Mateo County, n.d.). The signs promoted a message targeting individuals who know someone or see someone in distress who is considering suicide: "Speak Up, Save a Life. Suicide is Preventable. Most people who experience suicidal thoughts are in a temporary serious crisis. Suicide can be prevented with your help. It's up to us."

Massachusetts Bay Transportation Authority (Massachusetts)

The Massachusetts Bay Transportation Authority (MBTA) has also been partnering with suicide prevention groups for almost a decade. In 2010, MBTA partnered with Samaritans, a local suicide prevention organization, and posted signs with Samaritans' information at several commuter rail and subway stations (Jessen, 2010). The Samaritans noted a 50 percent increase in phone calls, and a 200 percent increase in the number of texts received.

In 2016, MBTA again partnered with the Samaritans to provide permanent signage and rotating digital displays displaying phone and text helpline information (Young, 2016). The signs also display the message, “If you or someone you know needs someone to listen, Samaritans is there.” Approximately 1,500 signs were expected to be posted at stations and crossings across the MBTA system (Marshall, 2018).

Metra (Illinois)

In 2017, Metra announced partnerships with several local mental health organizations to develop suicide prevention signage for stations and platforms, including DuPage Railroad Safety Council, McHenry County Mental Health Board, and Lake County Health Department. The signs were expected to be installed by the end of 2017 (Metra, 2017). One source also noted that in addition to reaching out to suicidal individuals, the campaign also targeted individuals who may be interested in helping a friend or family member (Pyke, 2017).

Long Island Rail Road (New York)

LIRR partnered with local resources to launch a suicide prevention campaign in 2017, and joined the New York State Office of Mental Health and the Suicide Prevention Coalition of Long Island. The Response Crisis Center and Long Island Crisis Center, both members of the Suicide Prevention Coalition, provide staffing for the LIRR suicide prevention/crisis intervention helpline, where counselors provide support to callers and evaluate their risk level. Follow-up calls and referrals to community resources are also provided as needed (LIRR, 2017). An image of the signage available on the LIRR website shows the following message, “Tell us your story. Don't end it.”

Tri-Rail (Florida)

Tri-Rail, a Florida commuter rail operating in Palm Beach and Miami-Dade counties, recorded its highest number of fatalities in 2017. Based on this increase in incidents, Tri-Rail partnered with the State and the 2-1-1 HelpLine, to launch a signage campaign. Tri-Rail planned to install 20 suicide prevention signs along tracks throughout Broward and Palm Beach counties. The signs display the message, “In Crisis or Depressed? Call 2-1-1. Help is Here for You 24 Hours a Day! Life is Worth Living” (Barszewski, 2018).

Summary

The benefits of partnering with a local suicide prevention group are very similar to the benefits of partnering with a national group—making a large number of individuals aware of services that are vital to improving mental health. While some local suicide prevention charities may not have the same level of resources or marketing as a national group, they may allow for a more customized campaign. It also may be somewhat easier to study the impact of a signage campaign since the effort will be more geographically restricted than a national campaign. Lastly, partnering with a local group may help to disseminate the message throughout the communities in which the rail carrier serves. Distributing a common message that is also seen outside of the rail system may help to reduce a perceived link between the rail system and suicide, and makes it clear that the rail carrier is helping to promote a broader message of suicide prevention.

2.3 Detection and Monitoring

Monitoring and detection along railroad tracks aims to identify people who are entering the right-of-way and remove them. If an individual is observed to be a threat, for instance, in a location they should not be or exhibiting behaviors indicative of suicidal intent, then authorities can attempt to intercede and prevent a potential train-person collision. Detection and monitoring can involve in-person strategies where someone is physically present to watch the tracks, or the use of cameras, sensors, or drones. Cameras and drones can be monitored by a remote person, or can use detection technology and algorithms to alert personnel that there is an individual on or near the tracks.

2.3.1 In-Person Monitoring

In-person monitoring may deter individuals from approaching the tracks. In cases where an individual is unaware or indifferent to the surveillance, train crews and/or pre-identified authorities may be notified.

Caltrain/City of Palo Alto (California)

In 2009, Palo Alto residents formed the group Track Watch to monitor a crossing where several teenagers took their lives. Volunteers monitored the tracks near the crossing, hoping to make it less attractive as a means to take ones' own life, and to show support for the city's troubled youth (Dong, 2009).

Later that year, the Palo Alto police department hired a security firm to patrol the crossing, and encouraged volunteers to focus on other nearby crossings. The guards were instructed to report suspicious behavior, approach the individual, and ask if the person needs help. According to one online source, "the guards aren't specifically trained to deal with a distraught, suicidal person, the security company tries to pick people who are appropriate for each assignment and gives them detailed instructions. In this case, he said, the guards selected are good communicators and 'rate a little bit higher than usual on customer service and attentiveness.'" The guards also have marked cars, intended as an additional deterrent (Samuels, 2009). The town planned to keep guards at four crossings until September 30, 2018 (Daily Post, 2018).

Washoe County Sheriff's Office (Nevada)

In 2016, the Washoe County Sheriff's Office in Reno, NV, established the Rail Auxiliary Team to help improve rail safety in the area. Civilian volunteers took part in hands-on training for reporting trespassers on railroad property, suicide awareness, and general railroad safety. The volunteers were trained in how to monitor the right-of-way area without entering the tracks, and were provided with resources for whom to contact should they identify a trespasser or an individual at risk for suicide. According to a 2016 press release by the sheriff's office, training was planned to continue in order to keep volunteers up-to-date with monthly on-line training and quarterly in-person training (Washoe County Sheriff's Office, 2016).

Summary

Although human monitors may be perceived as a deterrent, there are also challenges, including cost over time and basic human limitations in focus, attention, and the ability to see at night, each

of which can hinder effective monitoring. Technological advancements may help to overcome some of the challenges faced by human monitors. Although, the challenges associated with any effort to monitor an entire railroad system remain, such as how to dispatch personnel across such a large system when an issue is detected.

2.3.2 Camera Detection and Monitoring

Camera detection and monitoring can help to resolve some of the potential issues associated with in-person monitoring; however, this strategy can also present different challenges. For example, animals and debris can lead to numerous false-alerts, and although technology can be associated with a lower long-term cost than in-person monitoring, there may be a higher initial cost to put equipment in place.

Caltrain/City of Palo Alto (California)

Caltrain is the only carrier identified in publicly available resources that is testing camera detection and monitoring as a countermeasure for rail suicide and trespassing. According to a news article on the Palo Alto city website from March 2018, the city initiated a pilot project to test an “Intrusion Detection System” in 2016. Cameras were installed at the Meadow crossing using a combination of visible, thermal infrared cameras and other technology. Testing showed positive results, which led the city to begin to plan to transition from human monitors to exclusive use of the camera system in 2018. As part of the transition, human monitors remained for a number of months. The city planned to install four cameras on a single pole at three crossings (Churchill, Meadow, and Charleston), and two cameras on two poles at the Palo Alto crossing.

The cameras can detect objects up to 1,000 feet away in a range of lighting and weather conditions, and use a combination of technologies for detection, including thermal, and positioning controls (i.e., pan, tilt, zoom). Detection algorithms are used to detect specific behaviors of interest and transmit alerts to local law enforcement. The cameras will also transmit live video to off-site monitors, who will have the ability to make live voice announcements and provide instructions to people on the tracks or in the immediate area. Caltrain also plans to post additional signage at each crossing stating that the area is monitored by video surveillance (City of Palo Alto, 2018a).

The Palo Alto website also revealed that the cost of installing the cameras is approximately \$1.5 million, with an additional \$325,000 annually for maintenance and remote monitoring services. The installation was expected to be completed before June 2018, with exclusive use of the cameras, without guards, beginning in September 2018 (City of Palo Alto, 2018b). However, a June article published by the Daily Post stated that the city will continue to employ guards until the end of September 2018, costing the city an additional \$330,000. The extension was needed due to the complex nature of using a camera system to surveil the crossings.

Summary

As discussed in the previous section, technology-based surveillance can overcome some of the limitations of in-person monitoring, including cost, and the limitations of human perception and attention. However, surveillance of a large rail network is not feasible without allocating a considerable, and potentially unreasonable, amount of resources. Still, such a system may prove

beneficial in a setting where suicide or trespass activity is limited to a known geographic location, such as a specific crossing or hot-spot.

2.3.3 Drone Monitoring

Drone monitoring is similar to the use of detection cameras, but does not require the installation of hardware. It should be noted, however, that a human operator and monitor may still be required, adding to the cost of this type of monitoring. Additionally, camera systems are likely to be active at all times whereas a drone may be deployed only during certain times with a pre-identified need. For example, a drone may prove helpful in situations where authorities are trying to locate an individual on or near the right-of-way that is a known suicide risk.

Tri Rail (Florida)

Based on a search of publicly available resources, only one carrier, Tri Rail, was found to be considering the use of drones to monitor the carrier's problem areas in terms of suicide and trespass incidents. The drones are being considered as a means to detect individuals on the tracks, and warn train crews (Fry, 2017). No additional information was identified for this effort.

Brunswick Police Department (Maine)

Although not a rail carrier effort, the Brunswick Police Department in Brunswick, ME, partnered with FRA to use drones to detect trespassers along the Amtrak Downeaster line. The effort is not suicide-focused, but could serve as an additional example for carriers seeking to explore this mitigation for future use. The police department noted that the use of quadcopter drones will help them to cover more track in less time, and plans to take an educational rather than punitive approach. If an individual is detected on the tracks, an officer will be dispatched to educate the individuals on rail trespass, instead of issuing a citation. As of December 2017, the project received approval from the city, but Federal funding to purchase the drone equipment was not yet approved, and an agreement between the Brunswick Police Department the Federal authorities on how the drones will be used was not yet reached. The program was expected to be launched by summer 2018 (Byrne, 2017). No status updates were identified in the resources available.

Summary

Drones can be beneficial in specific situations, but also pose unique challenges such as the privacy and legal protections for those living near the tracks being surveilled, and the storage of drone data. There may also be a lengthy process to obtain the necessary licenses to operate the drones.

2.4 Training Railroad Employees and Authorities

An individual who is considering suicide on the rail system may exhibit behaviors or warning signs prior to their attempt (Mackenzie, Borrill, Hawkins, Fields, Kruger, Noonan & Marzano, 2018). Identifying these behaviors and potential signs of distress before an act of suicide occurs can provide a window of opportunity for an intervention to take place.

One potential rail suicide mitigation that takes advantage of this opportunity is the training of railroad employees, transit police or other authorities to approach individuals who are in distress to safely intervene (sometimes referred to as gatekeeper training). Research shows that this strategy can be effective in several settings, particularly as part of a larger suicide prevention program (Isaac et al, & Swampy Cree Suicide Prevention Team, 2009). Within the rail environment, this strategy is typically implemented at stations, and is likely to be less effective along open track and for freight operations because it is difficult to predict where an individual in distress may choose to access the tracks.

Several rail carriers have invested in training their employees and/or transit police to identify individuals who may be in distress and intervene; however, the details of these efforts are not always provided in publicly available resources.

Washington Metropolitan Area Transit Authority (Washington, DC)

WMATA began a suicide intervention training program in 2010, initially training the individuals who provide training to employees (i.e., “train the trainer”). The purpose of the program was to educate employees about suicidal behavior, and provide them with the information and confidence to intervene (WMATA, 2010). Initial training was completed in June 2011, and bus and train operators were expected to be trained as well as station managers by October 2011. The intervention training was incorporated into the employee recertification process in order to facilitate the training of employees in a range of occupations (WMATA, 2012a). To provide additional support for employees, WMATA distributed cell phones to several station managers that were programmed with contact information for mental health clinicians (Weir, 2012). According to the DC Department of Mental Health, 344 employees were trained by October 2012 (Weir, 2012). WMATA planned to train all 896 employees by January 2013, and will continue to identify any additional positions requiring training as necessary (WMATA, 2012b).

Metrolink (California)

In 2014, Metrolink also trained its front-line employees to identify warning signs for individuals at risk for suicide, and to intervene (Lemon, 2014). No additional details about Metrolink’s training program were identified in the resources available.

Caltrain (California)

Caltrain has been working with the San Mateo County Sheriff’s Office since 2002 to address transit safety and security needs. Currently, all Caltrain Transit Police are required to be trained specifically in crisis intervention, in addition to other emergency response and rail safety-related training (Lieberman, 2018). Caltrain Transit Police made 40 interventions of suicidal individuals in 2014. Transit Police are notified and dispatched when an individual is seen engaging in behaviors that indicate distress, for example, standing at a platform for too long without boarding a train, or chain smoking near a crossing. Additionally, train crews are notified to slow or stop. In an interview, one transit officer stated that when he approaches an individual, he first tries to engage in small talk. If an individual is found to be suicidal, family members and “emergency responders are notified, and a three-day involuntary hold and psychiatric evaluation are invoked.” The officer also stated that transit police monitor stations periodically to identify anyone potentially needing help (Myrow, 2015). To further assist in preventing rail suicide and

trespass, Transit Police also assist the homeless living along the Caltrain right-of-way, and have partnerships with local mental health services and services for the homeless (Lieberman, 2018).

San Francisco Bay Area Rapid Transit (California)

The San Francisco Bay Area Rapid Transit (BART) initiated a training program for employees in 2015; however, little detail about the training was found in publicly available sources. BART collaborated with the Bay Area Suicide and Crisis Intervention Alliance to train employees on how to identify individuals in crisis and intervene. BART also planned to distribute National Suicide Lifeline wallet cards in all stations that were provided by the Substance Abuse Mental Health Service Administration (BART, 2015).

Metra (Illinois)

Metra similarly began training its employees in suicide intervention in 2015, and noted the successful intervention of 39 potential suicides between January and September of 2017 (Pyke, 2017). Several occupations receive training, including train crews, ticket agents, customer service representatives, and managers. The training provides employees with the knowledge to identify and approach people who may be in distress or at risk for suicide (Metra, 2017). The strategy is known as Question, Persuade, Refer (QPR). As of May 2018, Metra trained 700 employees in QPR, and planned to also train employees who work in the field along the right-of-way. Metra also noted that the training has been successful, as 51 interventions were made in 2017, and an additional 15 interventions were made as of May 2018 (Wronski, 2018). Examples of behaviors that could indicate distress include lingering aimlessly (without boarding a train), or lingering very close to the tracks (Bellware, 2018).

Union Pacific Railroad (23 States West of the Mississippi River)

UP also launched a suicide intervention training program for its employees called “Courage to Care” (Stagl, 2017). Courage to Care is slightly different from the other training initiatives described in this section in that it focuses on employees. As noted on the UP website, is a way that UP encourages their employees to facilitate a strong safety culture, making sure that everyone is acting safely. While this effort is not specific to identifying the potential warning signs of suicide, it is a program that shares many common aspects and may help employees at UP to identify warning signs for suicide in their colleagues.

Summary

The training of rail staff and law enforcement to identify behavioral indicators of suicidal risk is becoming a more common method for preventing rail suicide. This type of program is likely to be most effective for passenger carriers or transit agencies who have personnel at stations where suicide incidents have occurred. This effort is unique in its use of in-person contact with individuals at risk. Intervention by a trained individual can help ensure that the person in need is connected with a help service that could mean the difference between life and death. Carriers may track the success of their training program by keeping record of all interventions made; however, the number of interventions should not be used as a measure of the program’s effectiveness in reducing the number of rail suicide incidents. It will be important to keep in mind that strategies which help people in need to connect with resources may show impact years

later (i.e., through helping people who may have later become suicidal to improve their mental health).

2.5 Suicide Prevention Events and Education

Suicide prevention events and public education is another way that rail carriers can reach out to passengers and other community members. This category includes events, forums and websites that aim to educate and involve the public in suicide prevention. This also includes conferences and events exclusively for industry that allow rail carriers to share information and learn from other's efforts.

2.5.1 Public Events and Forums

Online media and rail carrier websites are just some of the many strategies by which information can be disseminated about rail safety and suicide prevention initiatives. Holding open forums or meetings to share information with the public may be an effective way to enact change in a limited geographic region. Holding public events and forums can help to mitigate rail suicide indirectly through the sharing of information that can help encourage community involvement in suicide prevention. Several rail carriers across the country have held public events and forums.

Metrolink (California)

Metrolink held an event on November 19, 2014, in Union Station as part of their partnership with Didi Hirsch Mental Health Services previously described in [Section 2.2.2](#). The event highlighted Metrolink's suicide prevention campaign, and encouraged those feeling distressed to reach out for help (Lemon, 2014).

Caltrain (California)

The following year, Caltrain held a forum as part of its partnership with San Mateo County in September 2015 called "Speak Up, Save a Life: Suicide Prevention Forum." The event was promoted as part of suicide awareness month (San Mateo County Roadmap, n.d.).

In a separate effort, Caltrain held a fundraising walk for suicide prevention in 2013 and 2016 called, "Out of the Darkness Overnight." Caltrain also actively participates in mental health taskforces and suicide prevention activities led by Santa Clara and San Mateo Counties (San Mateo County Roadmap, n.d.).

Metra

More recently in September 2017, Metra collaborated with Amtrak and others to hold a symposium named, "Breaking the Silence." Approximately 100 mental health experts and community members were in attendance (Wronski, 2017). The impetus for the event was a spike in train strike deaths earlier in February of that year, and the lack of communication about this important topic among the public as well as railroads. Mental health experts educated attendees, and promoted the idea that anyone can intervene if they notice someone in distress and potentially at risk for suicide (Pyke, 2017).

Summary

Public events and forums can help to facilitate community involvement in suicide prevention and convey to the public that rail carriers are helping to promote a broader message that goes beyond rail suicide. This strategy avoids specifically associating railroads with suicide, and may help increase awareness of services that may help someone in need before suicide becomes an option. These types of events can be beneficial for engaging with local stakeholders and promoting community-level engagement. These events are held in hope of establishing more community engagement in suicide prevention.

2.5.2 Industry Conferences and Events

Industry events encourage information sharing and active participation in suicide prevention within the rail industry. They provide rail carriers with opportunities to learn from one another, to collaborate, and to share concerns and successes. Perhaps most importantly, they encourage communication about rail suicide within the industry. Although the issue impacts many throughout the industry, there has historically been a culture of silence that events like this may help to break.

Union Pacific Railroad (23 States West of the Mississippi River)

Thus far, UP is the only rail carrier to hold a conference specifically for the rail industry. The National Suicide Prevention Summit, held in August 2016, brought railroads together to discuss suicide prevention. Attendees included Amtrak, the Association of American Railroads (AAR), BNSF, CSX Transportation, and Norfolk Southern Corporation. Discussions covered several topics including using an epidemiological approach to better understand the driving factors, distribution and prevention of rail suicides, and reviewing mental health and substance abuse trends. Additionally, UP promoted the importance of employee mental health, and ensuring that employees have access to the help they need and feel comfortable seeking help, should they need it (Stagl, 2017).

UP also held a “safety stand-down” in 2016 that suspended rail operations in order to provide supervisors and employees with the opportunity to talk about various safety topics, including suicide prevention. The UP director of employee assistance and support services noted that many employees spoke of their experiences being affected by suicide, and felt that the stand-down was helpful (Stagl, 2017).

In addition to the safety “stand-down” and suicide prevention summit, UP held a Suicide Awareness Day in September 2016. Volunteers distributed suicide prevention literature that targeted employees and their families. This was part of UP’s effort to show employees that anyone can intervene and provide help to someone who is at risk for suicide, not only mental health experts (Stagl, 2017).

Summary

Rail industry events encourage communication, help to change the culture of silence, and enable rail carriers to openly learn from one another about effective mitigation strategies. Furthermore, industry events can provide an opportunity for rail carriers to support their employees, and encourage communication about how they are affected by suicide in a safe and supportive environment. While public forums held for local community members can effectively engage

local participation and collaboration, industry forums help to establish this type of collaboration at a broader scale.

2.5.3 Public Website Information and Education

Public websites and online educational material can be an important resource for promoting rail safety and suicide prevention. Online resources are generally low-cost, and can also serve as a way for rail carriers to communicate information about current mitigation efforts.

Some rail carriers include suicide prevention information on their own websites. A sample of carrier websites active as of November 2018 that directly address suicide prevention is provided below. Note that this is not an exhaustive list, and includes those websites that were easily identified.

Caltrain (California)

The Caltrain [website](#) states the effects of suicide on the railroad, its employees, and the larger community. Resources are provided including the crisis hotline and text line numbers, and media resources for how to report on suicides. A link is also provided to information on suicide prevention education, research and advocacy, and lists contact information for several organizations and groups. The website is also provided to the local suicide prevention resources available for San Francisco, San Mateo and Santa Clara counties.

Long Island Rail Road (New York)

The LIRR [website](#) provides information about rail safety and suicide prevention. The phone number to the LIRR suicide prevention/crisis intervention helpline, with a link to the "Tell us your story" poster. Refer to [Section 2.2.2](#) for more information.

Metro-North Railroad (New York)

The Metro-North [website](#) presents a poster for the Together Railroads and Communities Keeping Safe (TRACKS) program, and the National Suicide Prevention Lifeline number with the message, "You are not alone. We are here for you." TRACKS was originally focused on rider safety, grade crossing safety and trespassing. In 2018, it was expanded to include suicide prevention partnerships. Metro-North won a Gold Award for the program and their focus on safety (Metro-North Railroad, 2018).

San Francisco Bay Area Rapid Transit (California)

The BART [website](#) presents a public service announcement video for suicide prevention, and an image of a poster with the National Suicide Prevention helpline number and the message, "Suicide is not the route." Additional links and contact information to local resources in the Bay Area are provided, as well as media guidelines for reporting rail suicides.

Summary

By providing their own information about suicide prevention initiatives on their websites, rail carriers can take control of what information is being disseminated and the language that is used. This may help to promote more responsible language usage from others who find this information on the website. If this information is included on carrier websites, it will be important to update the information regularly.

2.6 Media Guidelines

The prevention of railway suicide can take place well in advance of an individual having thoughts of suicide, in some cases. Widely published stories of suicide deaths on the railway may cause people to believe that these events are more common than they truly are. A person experiencing suicidal thoughts may identify with certain irresponsibly worded media reports (even reports prior to their thoughts of suicide) and it may encourage them to consider the rail system as a means to take their life. As a result, responsible media reporting guidelines are an important part of preventing rail suicide.

Research has shown that irresponsible reporting of suicides in the media can lead to copycat suicide attempts (Stack, 2003) (Ladwig, Kunrath, Lukaschek, & Baumert, 2012) (Koburger, Mergl, Rummel-Kluge, Ibelshauer, Meise, Postuvan... & Hegerl., 2015). Specific recommendations have been developed to help minimize this risk. Recommendations are intended to increase information on how to get help, and limit the dramatization of these events, thereby reducing the likelihood that vulnerable individuals will identify with, or admire suicide victims or acts of suicide (Gabree & Mejia, 2017).

As of November 2018, Caltrain and BART are the only two carriers we identified that publicly provide information and guidelines for responsibly communicating about suicide. The BART website provides a list of guidelines⁴ cited from the Volpe Center, and the Suicide.org website. The Caltrain website provides a link to an online document⁵ that lists recommendations for reporting about a suicide, as well as warning signs of potential suicide, and what to do if someone is exhibiting those behaviors.

Summary

It is widely established that irresponsible reporting of suicide can lead to imitative acts of suicide, or copycat suicide attempts. A fear of promoting a message that could elicit copycat attempts is one potential reason that the public discussion of rail suicide is limited. However, given the importance of openly discussing suicide, the ideal strategy is not to refrain from talking for fear of making the problem worse, but rather to learn how to discuss the topic responsibly. Optimally, this would involve direct coordination between rail carriers and the media outlets that cover them; however, there may be media outlets that are more challenging to coordinate with or unknown outlets that decide to write about a rail suicide. For these cases, having resources available on the rail carrier's website may provide media outlets with an opportunity to educate themselves about how to responsibly report on this topic.

⁴ BART [website](#)

⁵ Caltrain [website](#)

3. Discussion

3.1 Discussion of Findings

In transportation, safety is the top priority. The transportation industry, as well as those that regulate the safety of this industry, regularly discuss efforts to increase the safety of the traveling public. An organization's public discussion of health and safety topics can help to promote safety in several ways. It may directly promote safe behaviors, encourage help-seeking among the public, and encourage other organizations to consider similar safety measures.

While many carriers publicize rail safety messages about highway-rail crossing safety or trespass prevention, they are often reluctant to discuss suicide prevention efforts. For example, highway-rail crossing and trespass safety are included in Operation Lifesaver presentations and are broadly discussed during events, such as rail safety week. However, carrier and regulator efforts to address suicide often are not included in the same public discussion, which may be for a variety of reasons. One reason is that suicide prevention initiatives require a different communication strategy.

Messaging the public about suicide is, and should be, treated differently than other types of public messaging. Public discussion of suicide requires a nuanced lens to ensure that the discussion will not inadvertently elicit copycat suicide attempts. Thankfully, there are a variety of resources⁶ available to help carriers navigate these important issues. A few key aspects:

- Discuss the carrier as a partner in a far more broad effort to address mental health.
- The rail system is woven throughout our society and is a vital part of many of our lives; therefore the rail system can help play a role in addressing these critical mental health issues.
- Avoid highlighting a focus on preventing only rail suicide, but rather trying to help people in need find necessary assistance.
- Sometimes discussion of suicide is not necessary, for example when discussing efforts to limit access to the right-of-way. These efforts would be effective for suicide or trespass, so specific suicide discussion may not be necessary.

This review revealed many instances where rail carriers' efforts to mitigate suicide are publicly discussed, either by the carrier itself or through the media. In total, 14 carriers and a range of strategies were identified including fencing, signage, detection and monitoring, training of employees and authorities, public and industry events, websites, and media guidelines.

- The strategy discussed most often was partnering with a national or local suicide prevention helpline (12 carriers). Two of these carriers noted partnerships with both national and local suicide prevention helplines.
- Some carriers tend to be more transparent regarding suicide prevention efforts than others. For example some carriers regularly post information and press releases directly

⁶ Volpe Center. (2018). [Media Reporting of Railway Suicides](#).

on their websites, while others never address suicide prevention directly on their websites.

- For the public information obtained from media sources, it cannot be determined, through this effort alone, if these media articles were written in coordination with the carriers or done without carrier involvement.
- Thirteen carriers included in this effort have information on at least one of their suicide prevention efforts posted on their website directly or in online documentation (e.g., quarterly report). Most discussed partnering with a national or local suicide prevention helpline. Only a few discussed employee training, and other public or industry events.
- In some cases, media articles include accident/incident data as an impetus for carriers launching suicide prevention efforts. Occasionally data is provided that reflects the number of casualties occurring after implementation of a mitigation. However, it is important to emphasize that it is often impossible to support a direct causal relationship due to the many other factors that can affect accident and incident rates.
- While some articles note the impact of rail suicides on safety and service, relatively few articles noted the grave impact of these events on train crews.

3.2 Conclusion

Talking about a safety issue, including mental health, is a proven strategy to increase safe behaviors. Given the discrepancy between the front-and-center trespass and crossing safety message and the infrequently discussed suicide prevention message, it is clear that efforts could be made to increase the confidence of rail carriers in talking about suicide. By helping carriers understand how to talk about this issue publicly, it will also help to increase the likelihood that media reports will be written responsibly.

Although this effort identified several publicly available news articles and information on rail carrier websites, there are gaps in the findings presented. It is likely that a number of efforts and carriers have not been included, as the current investigation does not cover carrier efforts that have not been publicly discussed.

Taking a different approach and contacting carriers directly may be able to provide a more exhaustive review of the efforts being undertaken by carriers today. One way to do this is through an industry survey, which can facilitate the collection of the most accurate and up-to-date information in order to produce a better picture of the suicide prevention efforts across the rail industry as a whole. This also provides an opportunity to encourage carriers to share information and lessons learned, and for researchers to work together with rail carriers to appropriately communicate publicly regarding this sensitive topic. This documentation can also provide examples for carriers looking for information on how to appropriately discuss suicide prevention.

4. References

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Abbreviations and Acronyms

Abbreviation or Acronym	Name
AAR	Association of American Railroads
BART	Bay Area Rapid Transit
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FDOT	Florida Department of Transportation
LIRR	Long Island Rail Road
LA	Los Angeles
MBTA	Massachusetts Bay Transit Authority
MCES	Montgomery County Emergency Service
NJ	New Jersey
NJT	New Jersey Transit
PATCO	Port Authority Transit Corporation
RD&T	Office of Research, Development and Technology
Action Alliance	National Action Alliance for Suicide Prevention
QPR	Question, Persuade, Refer
SEPTA	Southeastern Pennsylvania Transportation Authority
TRACKS	Together Railroads and Communities Keeping Safe
UP	Union Pacific Railroad
WMATA	Washington Metropolitan Area Transit Authority