

# AGENDA

6 August 2018

## Global Railway Alliance for Suicide Prevention (GRASP)

### Attendees:

Ariane, Ally (UK)

Bedini Jacobini, Francesco (US)

Chase, Stephanie (US)

Frauenfelder, Naomi (Australia)

Gabree, Scott (US)

Grizkewitsch, Michail (US)

Hiltunen, Danielle (US)

Mishara, Brian (Canada)

Moller, Jeffrey (US)

Silla, Anne (Finland)

Stevens, Ian (UK)

Emma Ranalli (US)

Van der Valk, Roald (Holland)

### Members Absent:

Girgore Havareanu (France)

Sho Ishii (Japan)

Helena Radbo (Sweden)

### Meeting Agenda:

8:00 – 8:10	Introductions and meeting objectives
8:10 – 8:55	Member updates (Australia, Canada, Finland, Netherlands, UK, US)
8:55 – 9:00	Break
9:00 – 9:45	Member updates (continued)
9:45 – 10:00	GRASP data collection effort and next steps
10:00	Adjourn

## MEETING NOTES

The Global Railway Alliance for Suicide Prevention (GRASP) is a working group with a goal of broadly sharing research and best practices for the mitigation of rail related trespass and suicide.

### Australia (Update provided by Naomi Frauenfelder, TrackSAFE Australia)

- TrackSAFE’s station-based campaign with Lifeline has been installed in stations in Victoria, New South Wales, and Queensland.
  - This includes their breathing billboard ([campaign](#)) named Pause.Call.Be Heard.
  - They are now moving into the evaluation phase of this effort, which is being conducted with the Centre for Mental Health at the University of Melbourne with Professor Jane Pirkis.
    - The evaluation is not yet complete, but early indicators are that the effort has been quite successful. A more detailed report is likely to follow in the coming months.
- TrackSAFE is coordinating Rail Suicide Prevention Roundtable discussions on a state-by-state basis. These Roundtable discussions bring together transport and health ministers from that state, along with key stakeholders, to talk about how they can work together to address these common issues.
  - The goal is to gather people who are key in the spaces of transportation and health to see how they might coordinate. In addition to the ministers of health and transport there was also participation from academics and Mindframe, who develops guidelines for how to responsibly talk about suicide publicly.
  - The last roundtable was in Victoria in November 2017. The next roundtable is planned for this coming November in Queensland.
  - One major question that was asked at the Victorian roundtable was “is there something we can do to communicate with the public?”
    - Follow existing media guidelines.
    - Don’t do anything controversial.
    - Consider extending Pause.Call.Be Heard. campaign to mobile phones via a digital extension of the campaign.
- Rail RU OK? Day was in April 2018. The rail-specific campaign is in its 4<sup>th</sup> year.
  - This year Rail RU OK? Day had 30,000 industry participants, up from approximately 8,000 in their first year.
  - Organized through a company champion at each rail carrier.
  - While this is a part of the national RU OK? campaign, this was a rail specific event. The event was supported by rugby and football players who act as R U OK? Ambassadors.
  - Each rail carrier’s approach was unique and many carriers included staff training or awareness campaigns as a part of the event. Additionally, participating groups had a range of activities, including: BBQs, ice cream, massage therapists, and mental health workshops.
  - Big freight operators did train wraps to promote the message (on the side of the train). In one instance, an individual reached out who had been considering suicide and saw the message on the train as they sat at a crossing – and this prompted them to reach out for help to turn things around.
  - They promoted the event on social media and the Prime Minister retweeted about the event to increase awareness.
- In New South Wales they have a program with corrective services called Changing Outcomes, involving community service.
  - This effort started as a pilot involving people who were tasked to complete community service. It was challenging for them to identify opportunities to perform community service, which made it hard for them to achieve the prescribed number of hours.
  - Transport is helping put these people to work through this new effort.
    - \$4M of repairs being done (e.g., vegetation or graffiti removal)

- It has made these locations safer and cleaner.
    - Some have gone on to work in those areas after completing community service.
    - This has been a great pathway to train and develop skills (and job offers).
  - TrackSAFE is looking to expand this pilot nationally.
- In Tasmania, there is a new effort to clean up the rail corridor.
  - This is modeled after Clean Up Australia Day, in which members of the public endeavor to clean up public spaces.
  - Certain rail corridors had become quite covered in debris, and this effort helped clean up all sorts of materials (appliances, rocks, debris).
  - They work with volunteers for this effort – 100 members of the community participated.
  - Looking to extend this effort nationally.
- *Questions and comments*
  - FRA (US): Who pays for the removal of the collected items?
    - The operator, TasRail, pays for removal. It is possible that they may secure outside funding to help support this, but the removal is the carrier’s responsibility.

**Canada** (Update provided by Brian Mishara, University of Quebec at Montreal)

- These updates are from the work being conducted at UQaM and not necessarily intended to encompass the breadth of work being done in Canada.
- <http://railwaysuicideprevention.com/> remains active and is going to have a remake in the fall.
  - Someone is updating the current website with new information at least once a week.
  - They also have a librarian who is helping to keep research up to date.
- Cécile Bardon recently completed a study about train crew trauma.
  - This effort is a prospective study on the impact of critical incidents on railway drivers.
  - The study also included near misses, which proved to be just as traumatic in many instances.
  - Transport Canada informed the research team every time there was an incident, then they worked with the teamsters union to contact the personnel; when possible they worked with supervisors as well.
  - The research team followed each individual for up to 18 months. They asked questions about how people reacted to incidents and what occurred after an incident (e.g., What help did they receive, what symptoms did they exhibit, with whom did they speak?)
  - The goal of the research is to identify what is associated with more positive outcomes or more negative outcomes. The hope is that the study will provide empirical data for best practices for treating rail worker trauma.
  - Data is currently being analyzed and will ideally out for publication in the coming months – will be posted on the website.
- UQaM expects to hear shortly about whether they will receive funding for an interactive map of all railway fatalities.
  - They developed this map over a 10 year period to see where an incident occurred and zoom in on the site for more detail of the area.
  - Prior version of this had information about mental health facilities in the area, though the definition of this was quite broad.
  - There was also information about locations of pay phones, though these are becoming scarce.
    - Ideally will provide data to municipalities about specific concerns. This data is not publicly available.
    - They don’t really have “hot spots” in Canada, but it still serves as a useful tool.
- There will be some follow up work with the Montreal Metro.
  - Considering advertising of services of mental health groups in the Metro again.

- Prior effort showed substantial increase in call volume to the suicide prevention number after they installed signage with a pay phone. However, the use and availability of pay phones is much different today than 15 years ago when the first study was done.
- One challenge is that those who are homeless, have disabilities, or serious mental health issues may not have mobile phones, which will remain a challenge as payphones continue to disappear.
- *Questions and comments*
  - TrackSAFE (Australia): When can we expect this to be published?
    - Hoping to be published in the coming months. Check the website or email for an update in the next few months.
  - Volpe (US): Will the interactive map be public?
    - No, it will not be made public. There are concerns about how reporters may use that information once they have it. Journalists don't always follow guidelines and such a map could drive irresponsible reporting.
  - Pro Rail (Holland): There is interest in seeing this map and what trends they find. In Holland there are some interesting clusters.
    - Not many clusters in Canada – it is a big country with a lot of distance along rail lines.

#### **Finland** (Update provided by Anne Silla, VTT)

- Ongoing project about railway suicide prevention – they are working to review and document on available safety measures to prevent rail suicide.
  - This will be similar to the effort that the US did back in 2014, but this will focus on the efforts that were evaluated as a part of RESTRAIL as well as other efforts from prior years.
  - Looking at what is being done and what evidence there is for effectiveness.
  - After the draft paper is complete they will have working groups:
    - What are the group's preliminary assessments?
    - What is feasible and what is cost effective?
  - If an intervention has not been implemented – the discussion of impact and evaluation will be more speculative.
- *Questions and comments*
  - Pro Rail (Holland): What costs should be taken into account?
    - There is an ongoing discussion about what to include in this estimate of cost.
      - Implementation cost will clearly be a part of this.
      - How much should we cover compensating workers for their time.
      - Not using exact calculations at this point, and are using scales.

#### **Netherlands** (Update provided by Roald van der Valk, Pro Rail)

- First, to provide some national context.
  - Netherlands has a very dense population around their rail system (second highest population density in Europe).
    - Their rail system is extensive (average of 5km between stations).
    - Trains are high frequency – 30 trains per hour. In some ways this is more like a metro network than a rail system.
    - About 1/3 of the population take trains to work.
  - Roughly 200 suicides occur on their railway each year and roughly 1,800 individuals die by all means of suicide each year.
    - 12% of all suicides are on railroads.
    - They started to address this in a more direct way in 2009.

- The current rail suicide prevention program deals with preventing rail suicide as well as care for those affected.
  - The biggest national operator is very involved.
  - They cooperate regularly with mental healthcare sector.
  - Have a €12M grant for this 5 year program. Most of this funding is for existing efforts (cameras, maps, signage, gates).
- They have a few new efforts that they are undertaking:
  - Intelligent cameras – using advanced technology to detect certain behaviors at stations or crossings.
    - They remain at a very early stage in the development of this effort and there remain some legal issues.
    - Hoping to hear back soon so that they can begin to pilot this work.
    - They are looking for certain behaviors:
      - Waiting at station without getting on a train.
      - Waiting at crossing without crossing the tracks.
      - Anyone who separates themselves from general public on platform.
  - Pilot testing the use of blue lights to mitigate suicide.
    - Currently, there are 5 installations throughout the country.
      - 2 are at station and 3 are at crossings.
    - These lights have been active for a few months.
    - There have been some issues with bats and the blue lights causing problems, but they are looking into this issue.
  - SUPREMOCOL – This is a new healthcare initiative to care for those who are suicidal.
    - This effort is being coordinated with their geographic models about where incidents are taking place.
    - Most take place in the southern quarter of the country.
  - Many mental health locations have their own security personnel.
    - This effort aims to educate these security personnel what behaviors are expected for those in need of assistance.
    - Pro Rail has given them their national center’s contact information in case they are missing someone from a mental care facility. Should that happen, ProRail will set trains to max of 40km/hr to improve the likelihood of stopping should the person enter the right of way.
    - These security personnel were given high visibility jackets so that they can be identified as more official.
    - This has been very successful at the first location it has been implemented. This includes the elimination of a hotspot within a couple years of implementing this plan.
    - Currently, they are trying to expand this to other locations as well.
    - Next step is to expand training to those not directly involved with railway operation
      - They have trained almost 4,000 people and the number of interventions is growing rapidly – would like to now include people who work in platform shops or office jobs at Pro Rail or operating companies.
  - Also starting to consider station design.
    - What stations are more prone to suicide?
    - There are still some stations where trains passing through a station without stopping do so on tracks adjacent to platform. Looking to make a change to move trains to other tracks.

## UK (Update provided by Ian Stevens, Network Rail)

- The UK did not see any effect of blue lights in their pilot testing and they have since abandoned their blue lighting efforts.
- The focus of rail suicide mitigation efforts in the UK is now primarily on the social side.
  - They have a lot of fencing up and have largely done as much as they can on this front – now trying to work together in a more societal context.
- Network Rail have an escalation process where they work with local authorities to ask what they are doing to try to address any identified hot spots.
  - Milton Keynes was a recent area of particular concern (7 suicide incidents in 3 weeks). This activity prompted their escalation process.
  - They have not seen a suicide incident in that area since October of last year.
  - The goal of this type of effort is to collaborate with local groups, and document what all is happening to mitigate these issues.
- [Small talk saves lives campaign](#) – This campaign has been a very successful intervention program.
  - Every year interventions have increased.
  - The idea of this is to initially help, by approaching the individual, but also to offer them support by helping them find that support.
  - Now also involving customers to get them to intervene.
    - This kicked off in November 2017.
      - Phase two was in April 2018 in 15 locations with known issues.
      - Phase 3 will take place in November 2018, £300,000 for a social media effort to involve customers.
  - Training more staff and expanding this training to office staff and have some collateral that they can wear to promote the effort.
  - Engaging with retailers – the view in the UK is that if retailers are making money off of the riders coming to the stations, they should be giving back by participating in suicide prevention efforts.
- A lot of contact with Parliament and local government – increasing awareness of railway suicide and was extremely successful.
  - Gaining local political acceptance of the issue and they can better work with local MPs to help address concerns.
  - This also helps when a cluster does appear – with better relationships in place it is easier to quickly address these issues.
- The industry recently had a conference about rail suicide prevention and 160 people attended. Part of the goal of this meeting was for rail people to learn from experts outside the rail arena. Attendees included:
  - Rail industry
  - Local authorities
  - Health authorities
- At this time there is quite a bit of research activity being undertaken (or having recently been completed).
  - A paper was recently published detailing why people choose to take their lives on the rail system. Paper is available upon request.
  - Additional work is now starting to dig into the question, ‘what is it about certain locations?’ What brings them to that spot and what can they do to change this?
    - People don’t travel more than 5km from their last known location to end their life on the rail system.
    - May need to look at the communities or societies where these people come from to learn more.

- Employed anthropologists to look into this.
  - How do we move rail down the ideation menu?
    - Don't push them elsewhere, but move it down the agenda.
- Network Rail recently developed a small leaflet which summarizes their work. The idea of this is that if they have a small document that local authorities can take with them, they are more likely to look at it and understand the issue better.
  - Wanted something to leave behind and not just a presentation/slide show.
  - The leaflet is quite small and can easily fit in a pocket.
- There was recently a call to action about suicide reporting. One major concern was the burden of proof for coroners. As a result, coroners have now moved from a burden of proof criteria for determining suicide to a probability based determination.
  - This will almost surely increase the number of suicides being reported, but the data will be much more reliable.
- Network Rail is now working with trade unions.
  - Looking at post incident support for both staff and bystanders.
    - Need to ensure that the proper level of support is offered.
    - Working with unions to identify what that support needs to be.
- Network Rail recently started working with the Nudge Unit – behavioral scientists.
  - How do you nudge away from suicide?
- A new effort will be piloted this October and November looking at how to build a curtain of sound to deter people from entering the right-of-way from platforms. This would be in place of platform screen doors.
- Looking at how different lighting (not blue) might affect mood or change ideation through distraction or other factors. Considering how to use lighting as a warning.
- Produce reports every month about their efforts.
  - Ian requested that members email him if they would like to be added to the list who receive these reports.
- *Questions and comments*
  - Volpe and TrackSAFE: Not a question, but a congratulations for Ian being awarded an MBE (Member of the Order of the British Empire) for *services to vulnerable people*. A well-earned recognition.
  - Network Rail: Any knowledge of the recent Stanford study about suicide as it relates to climate?
    - US: Yes, but not in much detail. US will follow up and see if they can learn more about the potential impacts of this.

**US** (Update provided by Scott Gabree, Volpe Center)

- *Media Reporting of Rail Suicide Incidents*: This research area is an effort to coordinate with rail carriers and media representatives to better understand the impact of the media on rail suicide and develop a strategy to encourage more responsible reporting practices.
  - Last year, Volpe started a stakeholder engagement group with rail carriers in the Northeast – the goal of which is to identify a strategy to encourage responsible reporting of rail trespass and suicide incidents. The group developed several draft documents, some of which are being used by stakeholders, but a consensus set of documents was never finalized. This lack of consensus was often due to differences in established terminology or processes that would have made small changes difficult and highly noticeable.
  - Volpe is working with our national rail safety education organization, Operation Lifesaver (OL), via a recently established Task Force, to improve how safety information is presented. This

- includes an effort to de-emphasize lethality in any public discussions of rail safety or trespass prevention.
    - First step was to train OL state coordinators in how to talk about suicide responsibly.
    - Next step is to help OL reconsider their current messaging.
  - Volpe is now working on two technology driven ways to understand the public's interest in rail suicide:
    - One is a Python-based program which is capable of scraping and/or actively monitoring Twitter for any Tweet that is related to a rail incident. The program uses neural network based machine learning to self-improve and is now 97% accurate in assessing if a Tweet is about a rail incident. Volpe is now working towards adding new categories (e.g., suicide vs. trespass vs. crossing or empathic vs. critical) which the program will be able to categorize. The hope is that this will provide some level of understanding of the baseline levels of activity on social media platforms following a rail suicide and may also help identify areas at increased risk for contagion based on online conversation level.
    - Second is a program capable of identifying Google search volume for specific terms (in determined locations and times). Volpe hopes to use this to understand how many people are seeking out information about rail suicide, especially after highly public incidents.
  - Volpe is pursuing a partnership with Amtrak to speak directly to journalists in certain problem areas. The idea is that Amtrak would host a lunch for local media. Amtrak would discuss some basic rail terminology and with whom to coordinate for details. Volpe would talk about suicide contagion and responsible reporting practices. The goal is to have the first session this autumn.
- *Countermeasure Development and Pilot Testing*: The goal of this research area is to work directly with rail carriers to: identify potential countermeasures which may help a particular carrier reduce suicide attempts on their system; assist or provide guidance for implementation; and track the effectiveness of any implemented countermeasures.
  - MBTA (Boston-area transit and commuter rail system) collaboration:
    - The first countermeasure pilot launched was a collaboration between the MBTA and the Samaritans suicide prevention charity. Initial signage campaign was limited to digital billboards in stations (largely transit stations). This effort was expanded in 2018 to include metal signage at crossings and in commuter rail stations.
    - Volpe is now participating in a task force aimed to understand additional actions which may be taken to reduce rail fatalities from trespass and suicide. No specific actions have been confirmed, but several have been discussed, including:
      - Training of staff in Question, Persuade, Refer (QPR) – to identify and effectively intervene with individuals exhibiting warning signs of suicide.
      - Increased surveillance in known problem areas.
      - Increased reporting of non-incident trespass witnessed by train crews (to improve identification of trespass hotspots).
      - Improved coordination with the local media (see above).
  - Other Carriers in the US:
    - Metra (Chicago): Training staff in QPR – had 54 successful interventions in the first year of staff training. This training has since expanded and their number of interventions continues to increase.



- City of Palo Alto (and Caltrain): Palo Alto has pilot tested an Artificial Intelligence (AI) based camera system which is now live at two crossings. The system will automatically detect trespassers and alert a continually staffed center when the system is activated. That command center can then speak to the trespasser through a speaker at the crossing. Thus far, they have no data on the effectiveness, but plan to complete a report once the system testing is complete next year.
  - New work with the Federal Transit Administration (FTA):
    - Volpe has just initiated new work with the FTA to look at suicides on the US subway systems.
    - One potential effort involves coordination with a professor from Harvard who is interested in automating the detection of suicide threats using AI. We would then work with subway systems to develop a process to intercede should the system detect a person at risk. This effort is just getting underway now.
- *Determination of Intent:*
  - This work is still ongoing – examining detailed data after an incident takes place to make an independent determination of probable intent. The data available, thus far, has shown that official determinations are often inconsistent with the data available in police reports, and the amount of detailed data available is variable.
  - A comparison of incident data from two commuter railroads in the US was completed to demonstrate the value in determining probable intent.
  - A document titled, [Characteristics of Trespassing Incidents in the United States \(2012-2014\)](#), was recently published that describes trespass and suicide incidents on railroad rights-of-way in the US to provide a better understanding of the contributory factors involved in these incidents, and provide recommendations of potential mitigation strategies.
- Other areas of interest:
  - Website: Volpe's [website](#) is still active and the FRA has a website that shows the same information. The notes from the last GRASP meeting are available at this website and we plan to post the new notes there once we get approval from participants.
  - FRA is close to launching a pilot test using a drone to detect trespass. The drone would identify trespassers and alert the nearest officer who would respond to that location.
  - Volpe is still working with the Center for Disease Control (CDC) on an effort to pull rail suicide incidents out of their [National Violent Death Reporting System \(NVDRS\)](#). This database, which now includes data from 40 states, provides detailed information about decedents of suicide, homicide, and other violent means of death. The data collected include information about substance abuse, mental health history, other histories of violence and other factors. The goal is to publish this paper in a journal at some point in 2018.
  - TRB has a subcommittee looking at trespass and suicide and this subcommittee identified several research areas to promote. The idea of this subcommittee is that they will put our research needs statements to show industry interest in these topics. Among the topics identified for RNS development were:
    - Evaluation of warning systems for trespassers (of approaching trains)
    - Harmonization of rail and transit data
    - Evaluate impacts of suicide and trespass education
    - Survey employees about trespass issues/solutions
    - Evaluate built-environments around rail systems to determine reasons for trespass
    - Evaluate design to better understand points of access
    - Estimate effectiveness and cost of trespass detection systems (e.g., drones)

### **GRASP Data Review Update** (Update provided by Danielle Hiltunen, SGT/Volpe Center)

- In December 2017, a request was sent out for data from GRASP members.
  - Received data from six countries (Australia, Japan, Finland, Sweden, UK, and US).
  - There were gaps in the data due to time constraints as well as country-level differences in the availability of the data, but the data that was provided was compiled.
- The team would like to fill those gaps to complete a more meaningful review. The team will reach out to member countries in September to help fill those gaps using a pre-filled online survey.
- The hope is to not just provide some better context about data, but also to identify potential opportunities for collaboration.

### **Additional Thoughts/Comments**

- UK: There is a lot of talk about the media and how to address the media. In the UK they try to be very proactive. They reach out when reporting is poor to try to address their concerns. They also feed good stories to the media regularly in hopes of changing the discussion about the topic.
  - Australia: To add to this, TrackSAFE has found that focusing on the trauma to the train crews was very effective in encouraging responsible media reporting, and in promoting the importance of the rail suicide prevention.
- US: Congress recently requested that the FRA provide a strategy for how to address rail trespass and suicide. FRA is nearing the completion of this document which is due to congress in the coming month.
- US: FRA recently launched a dashboard to explore rail trespass and suicide data. You can find the dashboard [here](#).
- US: In the US, many carriers have been reluctant to fence too much of the right-of-way, as the fencing is often cut and/or maintenance becomes more challenging. However, some carriers have recently developed models to help them better identify priority areas and fencing has been more common than in prior years.
- US: In August 2019 the FRA will host another Trespass Prevention Workshop. The location and exact date are not yet finalized, but the format will be similar to prior events (see [2015 here](#)) with the addition of a dedicated panel for international perspectives. All are invited to attend.

### **Next Meeting**

It was suggested that, if possible, we try to coordinate our next meeting to get together in person. Two potential locations/times were offered as possible options:

- August 2019 Trespass Prevention Workshop in the US
- 2019 Rail Safety Conference in Hong Kong (or perhaps Brisbane)