Rail Suicide Prevention

What do we know about prevention?

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Combining Fatalities

Incident Type:
- Crossing
- Suicide
- Trespass


Counts: 0, 100, 200, 300, 400, 500, 600, 700, 800
Rail Fatalities
at least 30% of all rail fatalities are confirmed suicides
Rail suicide isn’t going to disappear on its own. In fact, the issue is only likely to get worse.
2016 represented a 30-year high in suicide rate in the US; 13.42 suicide deaths per 100k people (nearly 45,000 suicide deaths)

Relative to other countries, the rail suicide rate in the US is very low
- Less than 1% of all suicides in the US occur on the rail system
- Firearm suicides are the most common

Still, firearm suicide decreased from 57% of all suicides in 2000 down to 50% of all suicides in 2015

In addition to suicide fatalities, roughly 4% of adults and 8% of young adults reported having considered suicide in 2015. Also in 2015:
- 2.4 million adults reported having made suicide plans
- 1.4 million adults survived a suicide attempt

https://afsp.org/about-suicide/suicide-statistics/
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- Suicide can be a hard topic. Absolutely — but there are many, many experts who would love to help you shouldn’t.
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- Suicide can be a hard topic
  - Absolutely – but there are many, many experts who would love to help you shouldn’t.
  - It’s also important to remember that the rail industry is already doing a lot to prevent suicide. It’s just that the problem is so big that it takes a lot of resources to address it.
What are we doing now – at Volpe?

- FRA/Volpe Rail Suicide Prevention Research Program
- Countermeasure Pilot Testing
- Media Reporting of Rail Incidents
- Intent Determination
- Prevalence/Demographic Assessments
- GIS Mapping
- Global Railway Alliance for Suicide Prevention (GRASP)

www.volpe.dot.gov/rail-suicide-prevention
or
www.fra.dot.gov/Page/P1109
Countermeasure Pilot Testing

• Direct collaboration with US rail carriers to implement and evaluate rail suicide prevention countermeasures

• Currently, little empirical evidence is available about rail suicide prevention
  • Most rail suicide mitigations are done reactively, without time for a proper evaluation

• Countermeasures may involve the direct implementation of engineering or other mitigations, or involve coordination with external groups
Impact of Media on Suicide

• Established body of literature about the impacts of the media on suicide
  • The Werther Effect is the term used to describe a rise in suicide rate following a highly publicized suicide

• Effects have been found specifically for rail suicides
  • Robert Enke – Germany
  • Viennese Subway System – Austria
  • Student Clusters – Palo Alto, CA
Data-Driven Efforts

- Determination of Intent
  - How reliable are suicide vs. trespass determinations?
  - TIDE criteria

- Prevalence and Demographic Analyses
  - What can we learn from studying trends in the data?
  - Are there any common characteristics with respect to:
    - individual involved
    - location
    - timing

- GIS Mapping of Incidents
  - Can mapping be used to allocate resources more effectively?
GRASP

• The Global Railway Alliance for Suicide Prevention
  • International work group of experts in rail suicide prevention

• Partners from ten countries

• Learning best practices from experts who have been attempting to address this issue for many years
GRASP

- Information provided by GRASP was quite broad
- Certain countermeasures were discussed during the most recent meeting:
  - Increasing awareness of help services
  - Station improvements
  - Community collaboration
  - Surveillance
  - Media reporting
International Efforts: Increasing Awareness of Services

• Australia: Pause.Call.Be Heard Campaign which includes a “breathing sign” for real-time stress relief

• UK has a traditional signage effort as well as the Small Talk Saves Lives campaign which is intended to encourage passengers to engage with one another
International Efforts: Station Improvements

• In the UK and Netherlands, they are asking station vendors to play a role and look out for people in need.

• In Australia they have launched a *Community Stations* initiative which is aimed at improving the atmosphere at stations.
International Efforts: Community and Governmental Collaborations

• Australia: In-person meetings with state-level officials (both rail and mental health)

• UK: Close coordination with Parliament and local government officials

• Netherlands: Efforts to coordinate with mental health facilities, including with security staff to help them identify people in need
International Efforts: Surveillance

• The Netherlands is currently exploring the potential to use intelligent camera systems to identify warning signs for suicidal risk

• UK is exploring similar technology

• Potential interest in researching this in the US as well
International Efforts: Media Reporting

- Mindframe (Australia) provides resources and workshops to help teach responsible media reporting practices.

- Network Rail, with support from Samaritans, are proactive in reaching out to reporters who report irresponsibly.
  - Also work with media to provide positive stories of rail safety initiatives or of people overcoming suicidal thoughts.
International Efforts: Why rail?

- Death believed to be certain
- Death believed to be quick and painless
- Aware of prior incidents from media and announcements
- Accessible and intervention is unlikely
Where can we go from here?

- We are still just learning how to best address this issue
  - Upstream vs. Downstream?

- Ensure that we understand the quality of the data we use to evaluate
  - Identify likely cause of hotspot areas
  - Increased confidence in selecting effective mitigation strategies

- Who are the most appropriate partners and what is everyone’s role?
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Thank you!

Thoughts? Questions? Ideas?

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