

Measure Name Plan for expedited incident response

Definition Create a plan to quickly and efficiently respond to trespass and suicide incidents.

Tags

Incident Type	Both trespass and suicide
Location	Both station and right-of-way
Intervention Strategy	Data: application and planning
Measure Group	Post-incident management

Description

Rapid incident response is critical to reduce delays and quickly and efficiently resume service after a train-person collision. Several parties are typically involved in managing the site of the collision, including rail police, local police, other emergency responders, train crews, and other rail employees. Clear communication and coordination among all parties is important to ensure that all parties understand their roles and responsibilities following a train strike.

Actions that can help to facilitate the rapid arrival of emergency responders include identifying the precise incident location and the pathways with the most direct access to the tracks, as well as accurately communicating that information to emergency responders. Using commercially available mapping software and web-based tools that use Global Positioning System (GPS) data or Geographic Information Systems (GIS) data can help to quickly provide critical location information to emergency responders [1]. It is also important to communicate the presence of obstacles that could hinder arrival to the incident site, including fencing, vegetation, anti-trespass panels, or other physical features. In addition, consider how close vehicles can get to the scene and whether responders will need to clear a footpath.

Checklists for each party's roles and responsibilities can help to efficiently respond to and manage incidents, for example, securing the site, collecting information, cleanup, and talking points for media inquiries.

Additional measures can be included as part of the response plan or implemented in parallel. Examples include: collaboration with local government and communities, improved data collection after an incident, managing the potential impacts of traumatic events on rail staff, and responsible public announcements after a train-person collision (see Related Measures).

Additional search terms: *collaboration, fast, planning*

Advantages

- Collaboration is relatively low-cost. The cost of this measure is primarily associated with the amount of time needed for staff to participate in plan development [1].
- In-house staff can conduct tasks associated with post-incident management.

- Incident response plans can help to expedite incident response and restoration of service at stations or along the right-of-way.
 - Having designated roles and responsibilities can ensure quick coordination during emergencies.
 - Coordinated incident response plans can help to increase local law enforcement's awareness of the need to address rail trespass and suicide within their communities [2].
 - Rapid incident response benefits rail carriers, ridership, and the community by reducing interruptions in services and minimizing road closures.
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Drawbacks

- When coordinating plans among multiple stakeholders, it may take time to receive and incorporate input from each party and to resolve any issues.
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Notable Practices

- Use checklists and other aids to make sure that all critical tasks, including data collection, are organized, efficient, and complete [3].
 - Make sure that the terminology used is understood by all stakeholders to avoid confusion [1].
 - Ensure that emergency responders receive location information in a format that is easy to understand and follow [1].
 - Use consistent location information, for example, GPS coordinates, milepost, or latitude/longitude format when communicating the location of the incident [1].
 - Consider how emergency responders will access the tracks (e.g., by foot, vehicle, or both) and any special equipment that may be required.
 - Clarify roles and responsibilities of all stakeholders while allowing for flexibility within the post-incident management plan.
 - Ensure that information about psychological first aid and support for train crews is readily available and managers and train crew members are aware of these resources.
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References

[1] RESTRAIL. (2014). *Evaluation of measures, recommendations and guidelines for further implementation: Pilot test #7, [Societal collaboration to prevent railway suicide – TrV & KAU](#)*.

Description: This document describes a pilot test of societal collaboration to prevent rail suicide as part of the RESTRAIL project.

[2] DaSilva, M., & Ngamdung, T. (2014). *Trespass Prevention Research Study-West Palm Beach, FL* (No. DOT-VNTSC-FRA-14-02). Washington, DC: Federal Railroad Administration.

Abstract: The United States Department of Transportation's (U.S. DOT) Research and Innovative Technology Administration's John A. Volpe National Transportation Systems Center (Volpe Center), under the direction of the U.S. DOT Federal Railroad Administration's (FRA) Office of Research and Development (R&D), conducted a Trespass Prevention Research Study (TPRS) in the city of West Palm Beach, FL. The main objective of this research was to demonstrate potential benefits, including best practices and lessons learned, of implementation and evaluation of trespass prevention strategies following FRA's and Transport Canada's existing trespassing prevention guidance on the rail network in West Palm Beach, FL, and all of its rights-of-way.

This report documents the results of the implementation of the guidance discussed in this study. The results of the trespass prevention strategies will be analyzed to help determine areas of potential risk, develop solutions to prevent and minimize risk exposure, and implement successful countermeasures in the future. The ultimate objective of the research is to aid in the development of national recommendations or guidelines to reduce trespass-related incidents and fatalities.

[3] Australian Transport Safety Bureau. (2009). [*Railway Accident Investigation Guidelines for Railway Network Owners, Railway Operators and Emergency Services Personnel \(3rd edition\)*](#). ATSB.

Document Excerpt: In addition to general information relating to railway accident sites, a checklist has been included with this booklet to guide response personnel and supervisory officers. The checklist should assist personnel in undertaking the essential actions in an environment that can easily become disorganised.

Additional Resources

Caltrain. (2016, September 6). [*Behind the Scenes of a Major Service Disruption*](#).

Description: Website includes information on incident investigation, mechanical issues, and police activity, medical emergency and fire.

Wilson, J. R., Norris, B., & Mills, A. (Eds.). (2007). *People and rail systems: human factors at the heart of the railway*. CRC Press.

Description: Following on from 2005's Rail Human Factors: Supporting the Integrated Railway, this book brings together an even broader range of academics and practitioners from around the world to share their expertise and experience on rail human factors. The content is both comprehensive and cutting-edge, featuring more than 55 chapters addressing the following topics: Passengers and public, Driver performance and workload, Driving and cognition, Train cab and interfaces: simulation and design Routes, signage, signals and drivability, Signalling and control of the railway, Planning for the railway, Engineering work and maintenance, Level crossings, Accidents and safety, Human error and human reliability, SPADs: signals passed at danger, Human factors integration and standards, Impairments to performance and Staff competencies and training. People and Rail Systems: Human Factors at the Heart of the Railway will be invaluable for all those concerned with making railways safer, more reliable, of higher quality and more efficient. It will be essential reading for policy-makers, researchers and industry around the world.

Related Measures

- Collaboration with local government and communities
- Identify funding opportunities
- Improved data collection after an incident

- Incident cost estimation
- Support rail staff after traumatic events
- Public announcements after a train-person collision