



Railroad Trespass Casualties on the US Railroad System: Brief Data Overview

Scott Gabree, Ph.D.

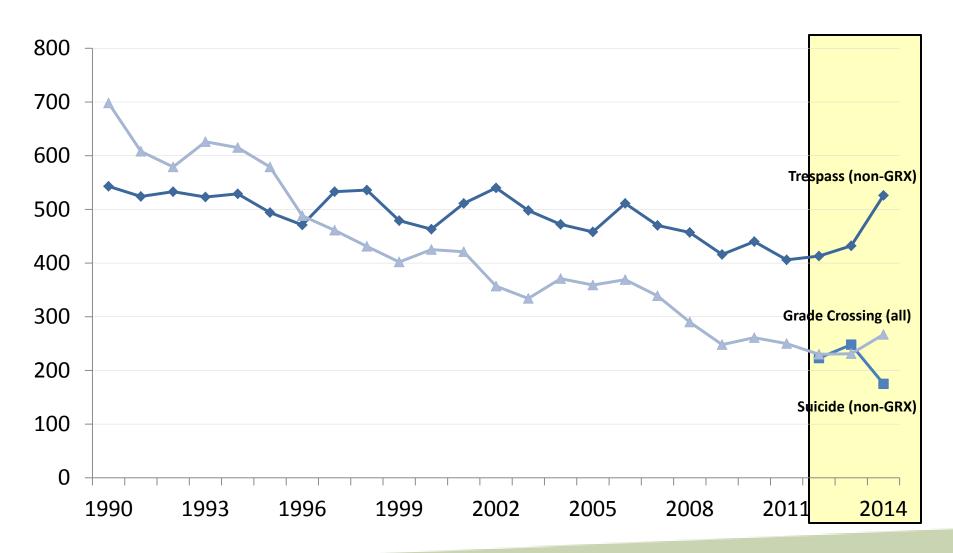
Railroad Trespassing: A National Problem – 3/24/2015



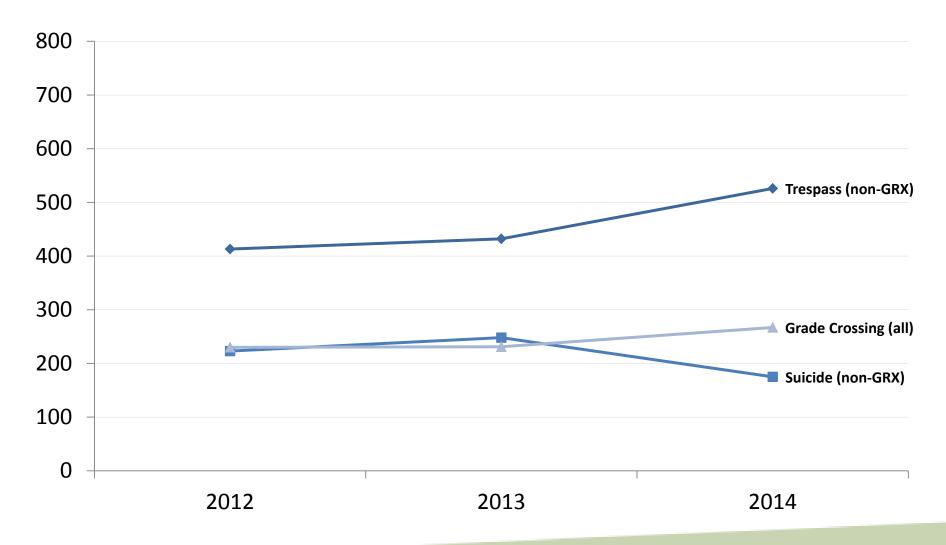




FRA Trespass and Grade Crossing Fatalities



FRA Trespass and Grade Crossing Fatalities



Types of Trespasser Casualties

□ <u>"Trespass"</u>

- Illegal
- May take place on the right-ofway or at a grade crossing
- Coroner, Medical Examiner, or other public authority determines death to not be a suicide
- Intent of the trespasser was to cross or walk along the right-ofway safely, but they were struck because they misjudged or were unaware of the train

"Suicide"

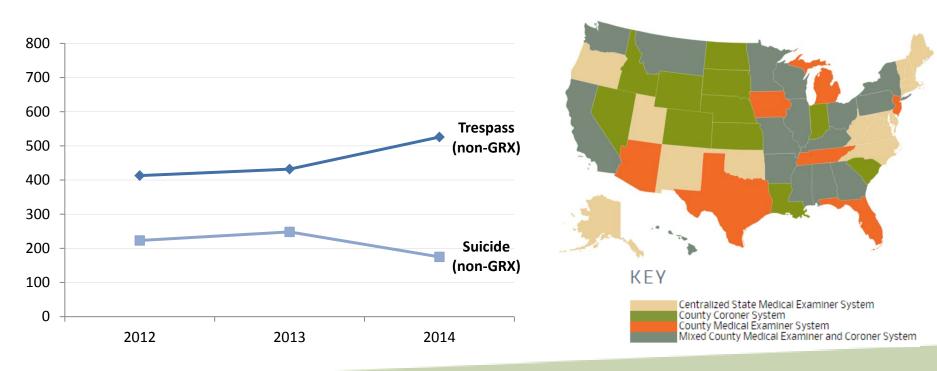
- Illegal
- May take place on the right-ofway or at a grade crossing*
- Coroner, Medical Examiner, or other public authority determines death to be a suicide
- Intent of the trespasser was to enter the right-of-way and be stuck and killed by the train

^{*}Note that a small subset of suicide fatalities may not be trespassers but rather individuals who die by suicide while legally on rail property.



Determining Cause of Death in the U.S.

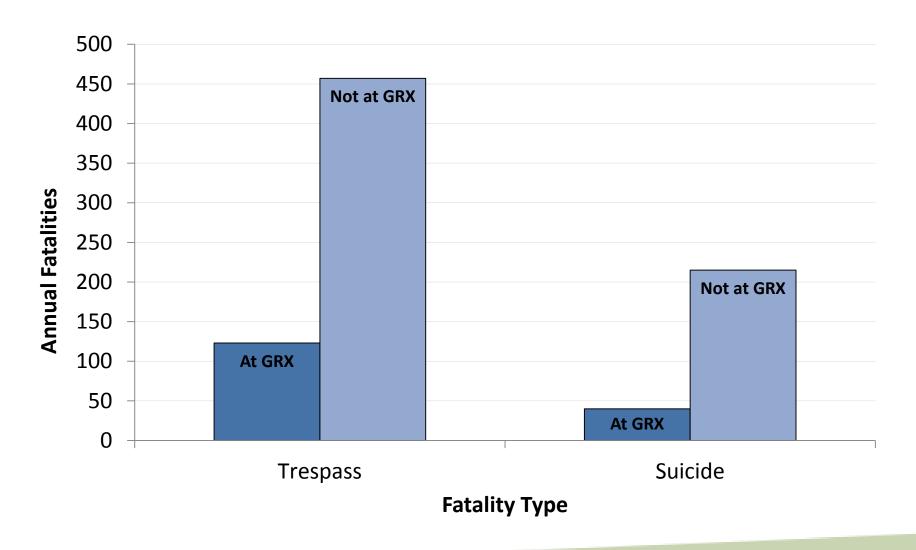
- Cause of death of all rail trespass fatalities is determined by a coroner, public police officer, or other public authority
 - Who is responsible varies from state to state (or by county within a state)
 - Training and qualifications of that individual also vary widely
 - Make take several months for final verdict to be reached



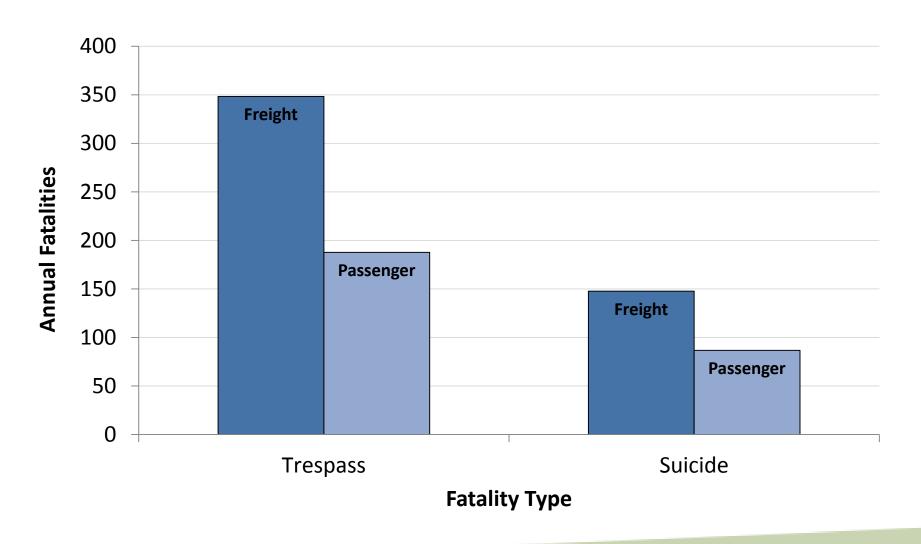
Trespassing on the Rights-of-Way

- Where do the incidents occur?
- When do the incidents occur?
- Who is involved in these incidents?
- What other factors may impact why an incident occurred where/when it did?

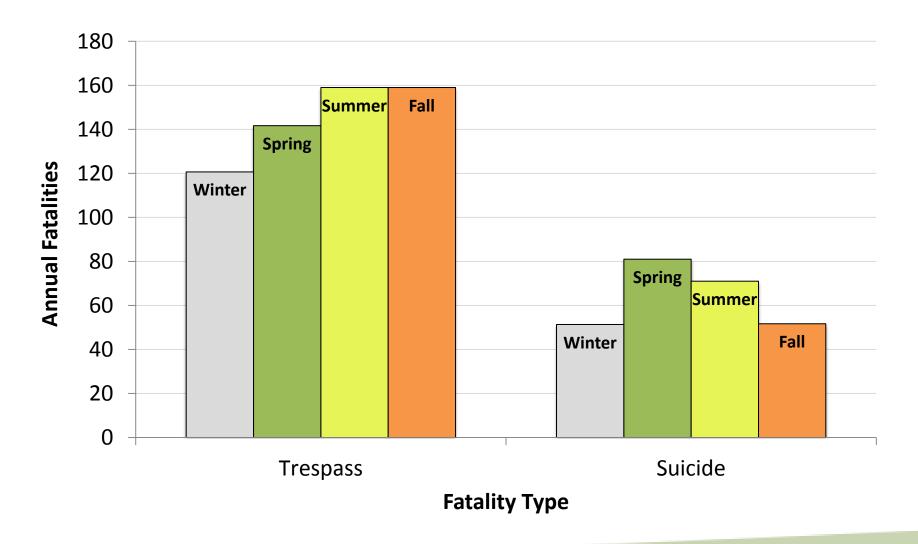
Where do trespass casualties occur?



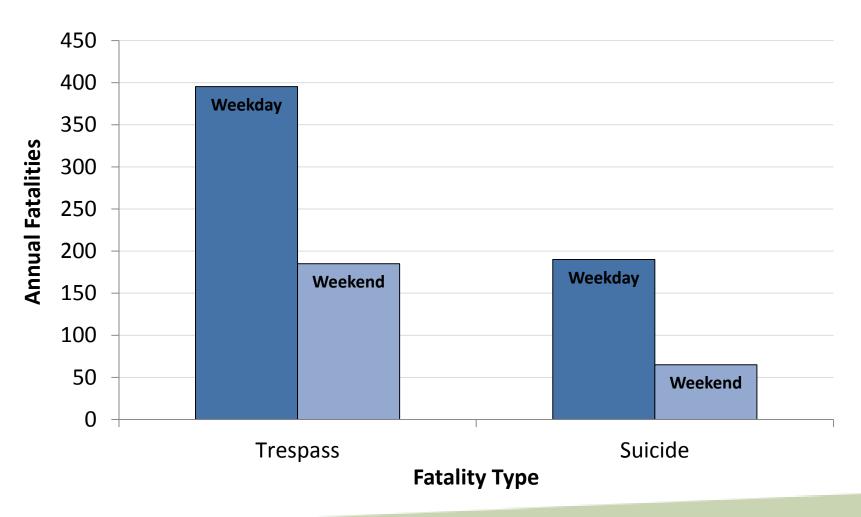
Where do trespass casualties occur?



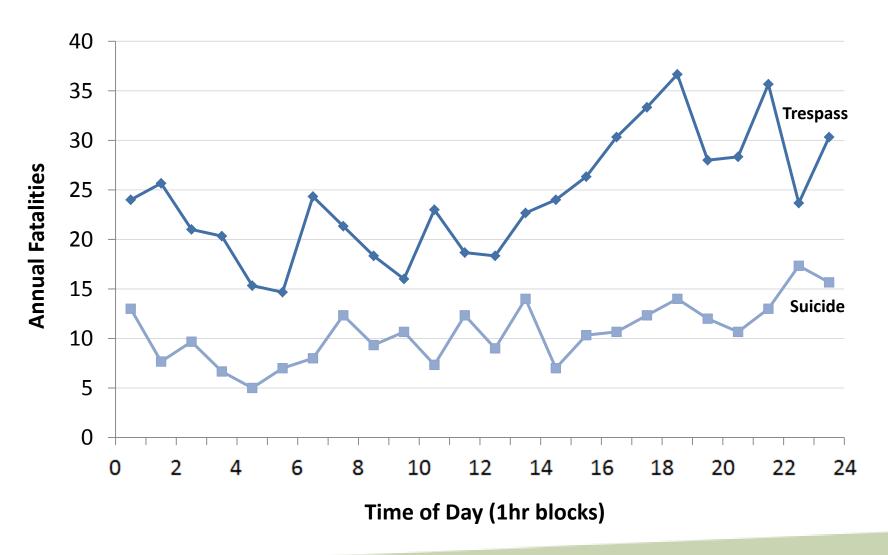
When do trespass casualties occur?

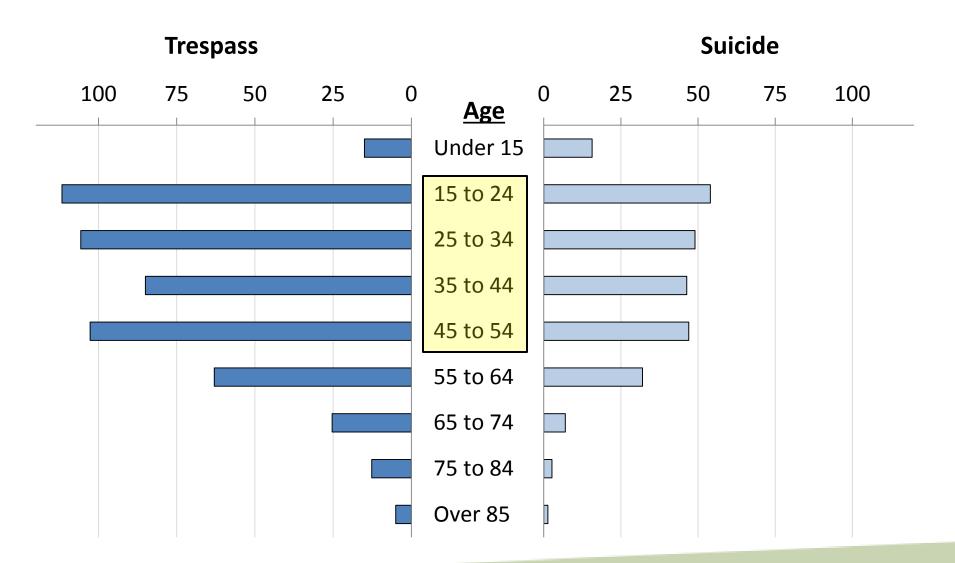


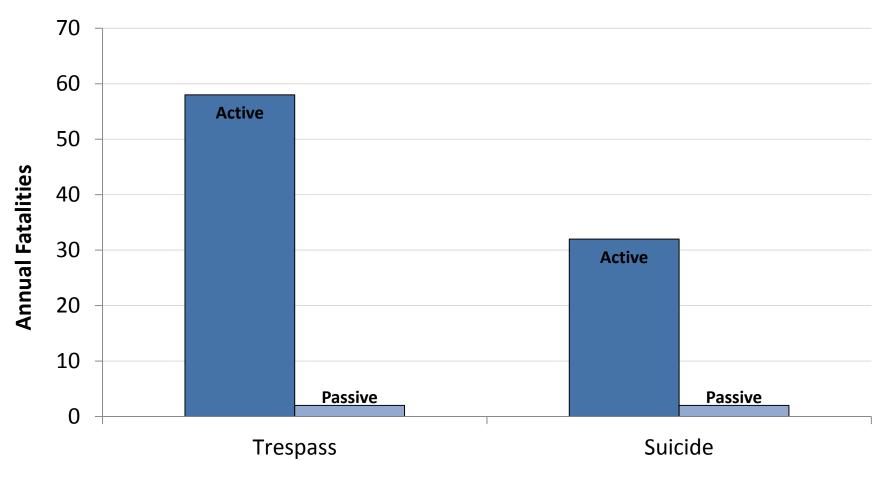
When do trespass casualties occur?



When do trespass casualties occur?

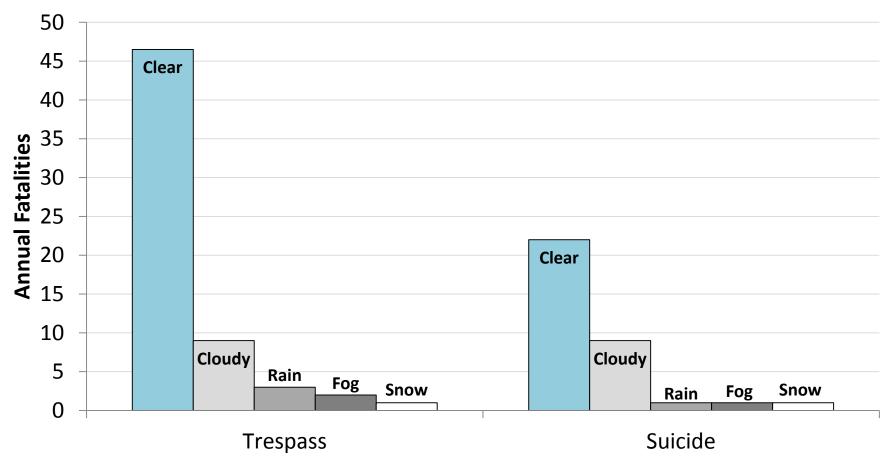






GRX Pedestrian Fatality Type





GRX Pedestrian Fatality Type

Summary

- □ Data surrounding incidents can help to understand the population most at risk
- Trespass fatalities and suicide fatalities share many similar characteristics
 - However, countermeasures may differ for the two groups
- Cause of death determinations are still complicated in the US and may vary between states and counties







Thank you!

Thanks to Our Team

- □ Sponsors (FRA)
 - Michael Coplen, FRA Office of Research and Development
 - Starr Kidda, FRA Office of Research and Development
- Volpe Center
 - Stephanie Chase, Ph.D.
 - Bianka Mejia
 - Cassandra Cantu
 - Danielle Hiltunen
- □ Association of American Railroads
 - Michael Martino
- George Washington University
 - Ann Doucette, Ph.D.

Scott H. Gabree, Ph.D.

Engineering Psychologist | Surface Transportation Human Factors Volpe, The National Transportation Systems Center | U.S. Department of Transportation 55 Broadway, Cambridge MA 02142 | Web: www.volpe.dot.gov

Office: 617-494-2530 | Email: scott.gabree@dot.gov