TRACK WORKERS KILLED BY TRAIN

Cause Map

Compliance With Safety Procedures Under Investigation

A derailment and the fatalities of two railroad workers on April 3, 2016 has led to an investigation by the National Transportation Safety Board (NTSB). This investigation will look for recommendations to prevent future derailments, as well as other impacted goals, including the deaths of two workers and injury to 37 passengers.

"Basic rules of railroading and federal regulations should have prevented the Amtrak derailment near Philadelphia on Sunday that killed two maintenance workers."
- Ashley Halsey III, reporting in The Washington Post

1 Problem

What	Problem(s)	Amtrak crash; workers killed
When	Date	April 3, 2016
	Time	7:53 a.m.
	Different, unusual, unique	Construction equipment on track
Where	Facility, site	Chester, PA
	Unit, area, equipment	Amtrak train 89
	Task being performed	Maintenance crew working on rails

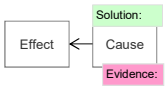
Impact to the Goals

Worker Safety	2 maintenance workers killed
Public Safety	37 passengers injured
Customer Service	Train derailed
Property/ Equipment	Damage to train, construction equipment
Labor/ Time	Response, investigation

Frequency	3 track-worker fatalities on Northeast corridor since March 1, 2016

2 Analysis

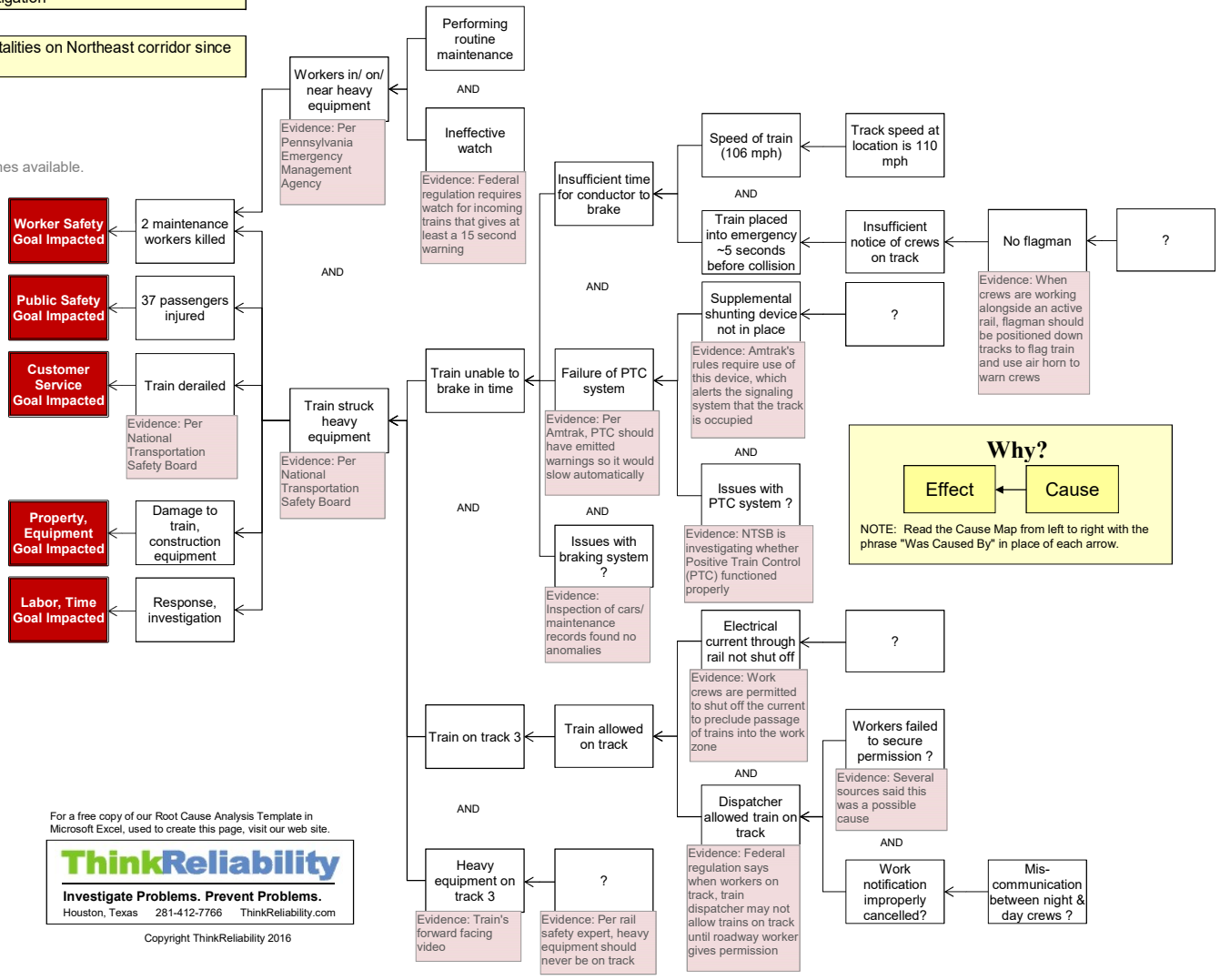
More Detailed Cause Map - Add detail as information becomes available.



When capturing causes, it's important to also include evidence, which validates the cause.

3 Solutions

It appears that multiple procedural requirements were not followed, but more thorough investigation is required to determine why and what can be done in the future to improve safety by preventing derailments and worker fatalities.



Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis

Step 1	Problem	What's the Problem?
Step 2	Analysis	Why did it happen?
Step 3	Solutions	What will be done?

For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

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