

1 Problem

What When	Problem(s)	Bus collided with freight train
	Date	January 14, 2015
	Time	7:30 AM
Where	Different, unusual, unique	Icy conditions
	Facility, site	I-20 near Odessa, TX
	Unit, area, equipment	Prison bus
Impact to the Goals	Task being performed	Transporting prisoners from Abilene to El Paso
	Safety	10 killed, 5 injured
	Environmental	N/A
	Customer Service	Negative publicity
	Regulatory	?
	Production/ Schedule	Impact to train schedule
		Traffic on I-20 impacted
	Property/ Equipment	Damage to bus and train
	Labor/ Time	Investigation/emergency response

BUS/TRAIN COLLISION

Cause Map

10 killed when bus hits moving train

On the morning of January 14, 2015, a prison bus went off an overpass and collided with a moving freight train. Ten were killed and five more injured, and both the train and bus were damaged. Investigators believe the accident was weather-related.

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

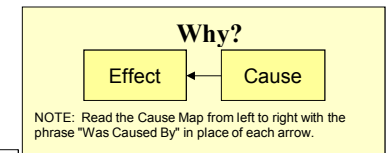
CAUSE MAPPING

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?

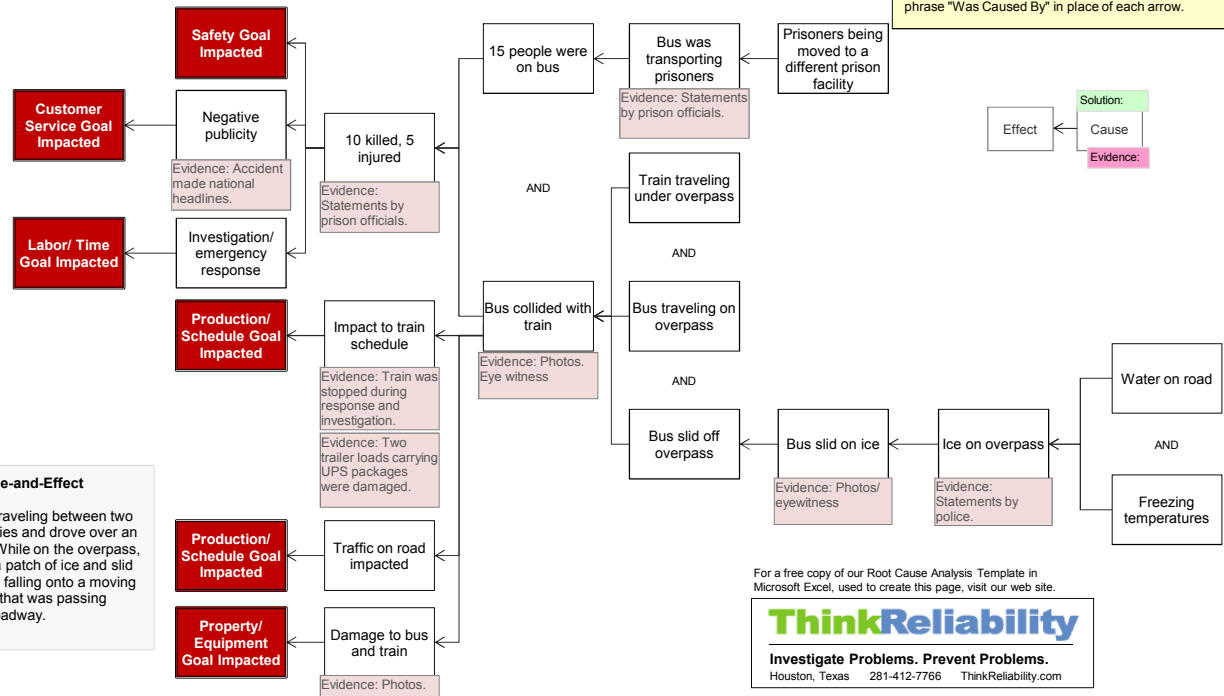
2 Analysis

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



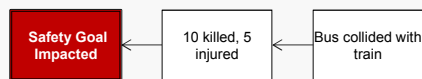
"It's with a heavy heart that we mourn the loss of those killed and injured this morning in a tragic accident. Their loved ones will be in our thoughts and prayers."

- statement by Brad Livingston, executive director of the Texas Department of Criminal Justice



Basic Level Cause Map - Start with simple Why questions.

Basic Cause-and-Effect



A bus was traveling between two prison facilities and drove over an overpass. While on the overpass, the bus hit a patch of ice and slid off the road, falling onto a moving freight train that was passing under the roadway.

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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