

# 1 Problem CHICAGO O'HARE COMMUTER TRAIN DERAILMENT INJURES 33

<b>What</b>	Problem(s)	Train derailment, Injuries, Train & Station damage, O'Hare Station closed for 6 days
<b>When</b>	Date	March 24, 2014
	Time	2:49 AM
	Different, unusual, unique	Temperature was 19F
<b>Where</b>	Facility, site	Chicago-O'Hare International Airport Station
	Unit, area, equipment	Chicago Transit Authority (CTA) Blue Line run 141
	Task being performed	Entering station
<b>Impact to the Goals</b>		
<b>Safety</b>		33 people injured (32 passengers, 1 train operator)
<b>Customer Service</b>		Negative Publicity for CTA
<b>Production/ Schedule</b>		Passenger / Train Delays
<b>Property/ Equipment</b>		Train damage, Station damage \$9,100,000
<b>Labor/ Time</b>		Emergency Response / Investigation
<b>Personal Labor</b>		Train Operator lost job
	Frequency	1x
	This incident	\$9,100,000
	Annualized Cost	\$9,100,000

## Chicago, IL March 24, 2014

At 2:49 AM on March 24, 2014, a Chicago Transit Authority (CTA) Blue Line train entered the Chicago-O'Hare International Airport Station. The train failed to stop before the end of the platform, hitting the track bumper post, exiting the track, and landing on a set of stairs and escalators. 33 people on the train were injured including the train operator.

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

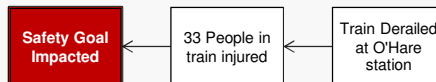
### CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis

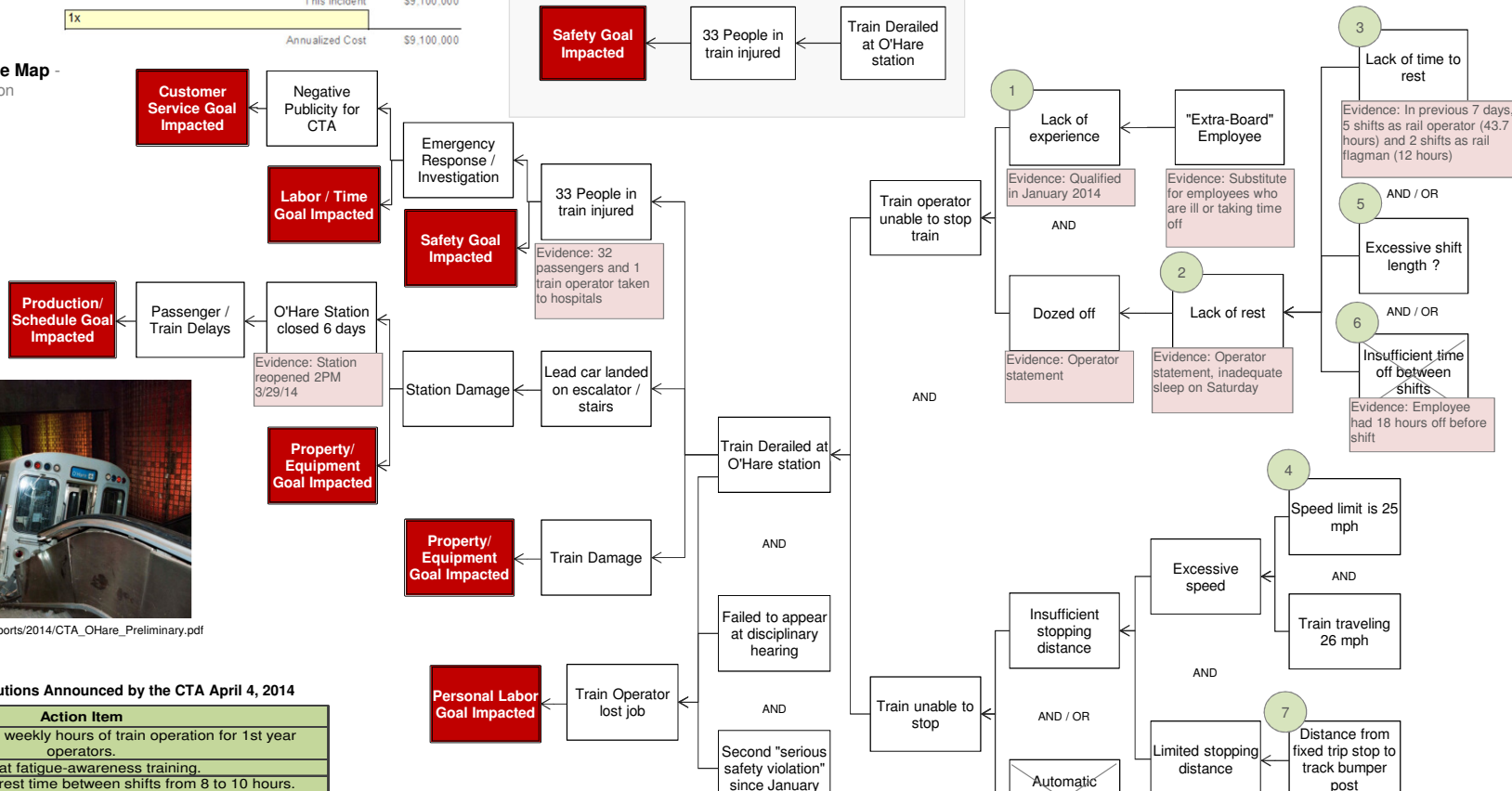
- Step 1 Problem** - What's the Problem?
- Step 2 Analysis** - Why did it happen?
- Step 3 Solutions** - What will be done?

## 2 Analysis

Basic Level Cause Map - Start with simple Why questions.



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



Source: [http://www.ntsb.gov/doclib/reports/2014/CTA\\_OHare\\_Preliminary.pdf](http://www.ntsb.gov/doclib/reports/2014/CTA_OHare_Preliminary.pdf)

## 3 Solutions Solutions Announced by the CTA April 4, 2014

No.	Action Item
1	Establish limit of 32 weekly hours of train operation for 1st year operators.
2	Repeat fatigue-awareness training.
3	Increase minimum rest time between shifts from 8 to 10 hours.
4	Reduce speed limit for trains entering station from 25 to 15 mph.
5	Establish a maximum of 12 hours of actual train operations duty during a 14-hour period.
6	Establish requirement of at least one day off in any seven-day period.
7	Move trip switches farther from bumper posts.

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