FRA Safety Update

Association of State Rail Safety Managers

Robert C. Lauby
Associate Administrator for Railroad Safety
Chief Safety Officer

September 9, 2014

Overview

- Discuss some of the Office of Railroad Safety Priorities.
- Discuss the Concept of Safety Culture.
- Discuss Crude Oil and Some of the Initiatives.

Office of Railroad Safety FY 15 Priorities

U.S. Department of Transportation
Federal Railroad Administration

PRIORITIES	Pillar 1 Rigorous Oversight Based on Data	Pillar 2 Proactive Approaches for Early Identification and Reduction of Risk	Pillar 3 Investing in Rail Infrastructure and Robust R&D
PTC: Design and Implement FRA System Approach *(Regulation, Policy Development, Training) (Lead: Hynes)*	✓	✓	
C3RS: Design and Implement System Approach (Responsible Office, Policy Development, Resource Allocation, Training)	✓	✓	
Crude Oil: (Lead: Warren) - Improved Track Safety (Immediate, Near Term, Long Term) - Tank Car improvements (Rule Enforcement)		✓	✓
Emergency Notification System (ENS): (Lead: Moscoso) - Develop inspection policy		✓	
Office of Safety Reorganization (Lead: Rennert) - Changes approved and hiring actions executed	✓		
Training: Establish Training Development System for Field - Incorporate new equipment training (e.g. PTC, ECP) - High Speed Rail Training (Track Focused) - Root Cause Analysis Training (accidents)		✓ ✓ ✓	
Data Analysis Tools for HQ and Regional Use (Lead: Ron) - FARs Implementation (New Accident Report System) - GIS (Map based) tool that maps “hot spots”	✓ ✓	✓ ✓	
New Rule Implementation - Railroad Training Assessment (part 243) - Risk Reduction - Critical Incident Plan	✓ ✓ ✓	✓ ✓ ✓	

Office of Railroad Safety FY 15 Priorities cont.

U.S. Department of Transportation
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PRIORITIES	Pillar 1 Rigorous Oversight Based on Data	Pillar 2 Proactive Approaches for Early Identification and Reduction of Risk	Pillar 3 Investing in Rail Infrastructure and Robust R&D
Regulatory Goals – Which ones do we want to prioritize for FY 15?		✓	
- Securement		✓	
- Train Crew Size		✓	
- Risk Reduction		✓	
- System Safety Rule		✓	
- Engineering Task Force		✓	
- Fatigue Management	✓	✓	
- Tourist Railroad	✓	✓	
- Rail Integrity		✓	
- Recording Device			
- Remote Control Locomotives			
New Rule Implementation	✓	✓	
- Railroad Training Assessment (part 243)	✓	✓	
- Risk Reduction	✓	✓	
- Critical Incident Plan			

Safety Culture

Association of State Rail Safety Managers

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Overview

- Discuss the Concept of Safety Culture
- Recent Metro-North Accidents
- How Safety Culture can be viewed

Rail Safety Improvement Act

U.S. Department of Transportation
Federal Railroad Administration

‘‘§ 20156. Railroad safety risk reduction program

‘‘(c) RISK ANALYSIS.—In developing its railroad safety risk reduction program each railroad carrier required to submit such a program pursuant to subsection (a) shall identify and analyze the aspects of its railroad, including operating rules and practices, infrastructure, equipment, employee levels and schedules, **safety culture**, management structure, employee training, and other matters, including those not covered by railroad safety regulations or other Federal regulations, that impact railroad safety.

Definition of Safety Culture

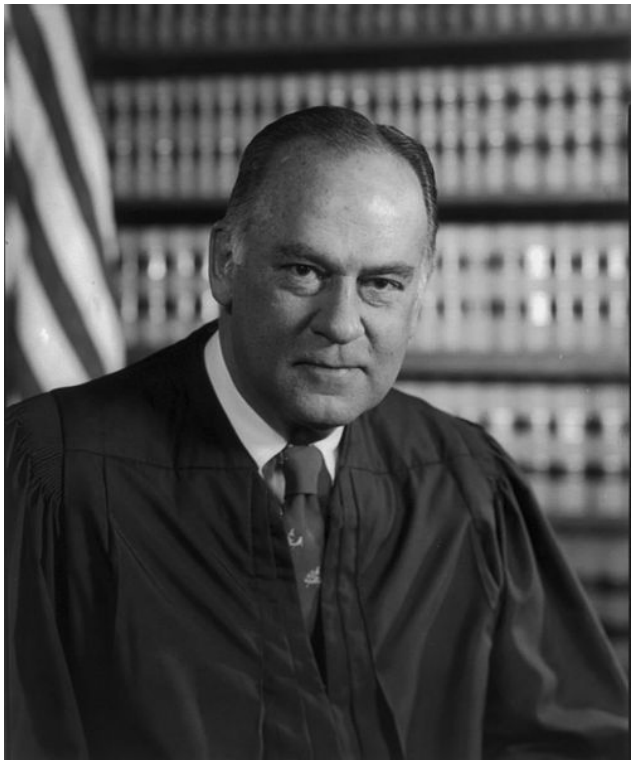
U.S. Department of Transportation
Federal Railroad Administration

System Safety Working Group definition

SAFETY CULTURE:

Safety culture means the shared values, actions, and behaviors that demonstrate a commitment to safety over competing goals and demands.

Potter Stewart



Potter Stewart

Supreme Court Justice

"…pornography (is) hard to define, but I know it when I see it."

Metro-North System

Metro-North Statistics

- Second largest commuter railroad in the United States
- Annual ridership of 82,953,628
- Subsidiary of Metropolitan Transit Authority (MTA)
- Three main lines run from midtown Manhattan north up the Hudson River to suburban New York and east to Connecticut

Before May 2013

- No Passenger fatalities in 30 years of operations.
- No NTSB accident investigations.
- Good Safety Statistics that showed that Metro-North's defect ratio was safer than the commuter railroad average.

Metro-North Statistics

Calendar Year	Type of Commuter Rail	Defect Rate
2005	All Commuter Rails	0.050818
2005	Metro North	0.031307
2006	All Commuter Rails	0.042161
2006	Metro North	0.030352
2007	All Commuter Rails	0.039601
2007	Metro North	0.026026
2008	All Commuter Rails	0.050037
2008	Metro North	0.024122
2009	All Commuter Rails	0.04651
2009	Metro North	0.035672
2010	All Commuter Rails	0.043845
2010	Metro North	0.036987
2011	All Commuter Rails	0.047762
2011	Metro North	0.04265
2012	All Commuter Rails	0.059568
2012	Metro North	0.043478
2013	All Commuter Rails	0.054268
2013	Metro North	0.064535
2014	All Commuter Rails	0.080371
2014	Metro North	0.110756

Metro North defect ratio was lower than the Commuter Rail Industry average from 2005 to 2012.

Dr. John K. Lauber

Dr. John K. Lauber

NTSB Member

"…just because you haven't had an accident doesn't mean you have a safe operation."

Recent Accidents

- Bridgeport, CT – May 17, 2013, Derailment and Train-to-Train Collision – 50 Injured.
- West Haven, CT – May 28, 2013, Roadway Worker Employee Fatality.
- Spuyten Duyvil, Bronx, NY – July 18, 2013, CSX Freight Train Derailment on Metro-North Track.
- Spuyten Duyvil, Bronx, NY – December 1, 2013, Metro-North Passenger Train Derailment– 4 fatalities and 70 injuries.
- Manhattan, NY - March 10, 2014, Roadway Worker Employee Fatality

After May 2013

- 4 - Passenger Fatalities
- 2 - Employee Fatalities
- Over 120 injuries to Passengers and Employees

- 5 - NTSB accident investigations.

Spuyten Duyvil

U.S. Department of Transportation
Federal Railroad Administration

After Spuyten Duyvil, FRA initiated Operation Deep Dive

Operation Deep Dive

- **IT WAS NOT:**
    - An inspection blitz with dozens of inspectors conducting routine inspections.
- **IT WAS**:
    - A New tool
    - Designed to Dig deeper – safety culture, processes, procedures, protocols, safety enhancements, best practices.
    - Designed to assist Metro-North, not to punish

Operation Deep Dive

FRA identified **three overarching safety concerns** that affect all facets of Metro-North as an organization and the safety of its rail operations.

- Metro North's over emphasis of train operations and on-time performance over all other considerations.
- Metro North's inadequate training and qualification program, and
- Metro North's ineffective safety department and **poor safety culture.**

Specific Findings

Train Operations, On Time Performance

Symptoms:

- Inadequate time to inspect track
- Poor track condition
- MOW Employees always feel rushed
- Signal maintainers hesitate to take tracks out of service.
- 30% of Signal Tests conducted late.
- Efficiency testing not focused on speed.

Ineffective Training and Qualification Program

Symptoms:

- Poor track maintenance.
- Efficiency Testing Officers not trained and qualified.
- Training records not available.
- Lack of knowledge on RWP.
- Signal maintainer training inadequate.
- Lack of knowledge on track inspection techniques.
- Electric Traction Safety Manuals not available.

Specific Findings

Ineffective Safety Department and Poor Safety Culture

Symptoms:

- System Safety Plan not complete and not followed.
- Safety Department has minimal safety qualifications.
- Mileage sign posts missing.
- Operational Testing program does not meet FRA requirements.
- Operating rule training documentation missing.
- Cell Phone usage on ROW.
- No proactive safety advocacy – no efforts to identify safety shortfalls and no ownership
- Road Foremen not aware of MN efficiency testing program.
- Engineer and conductor qualification records incomplete.
- Safety representatives do not attend safety meetings.
- Roadway worker Protection procedures do not meet FRA requirements.

A Balanced Approach

- Safety and service must be balanced.
- Risk should be kept ALARP.
- Understand and acknowledge the role of safety to mitigate risk.

A Seat At The Table

- Safety must **ALWAYS** have a seat at the table along with other considerations!

Safety Culture

That’s how you build a positive **Safety Culture.**

Questions?

Crude by Rail
the Regulatory Outlook

Association of State Rail Safety Managers

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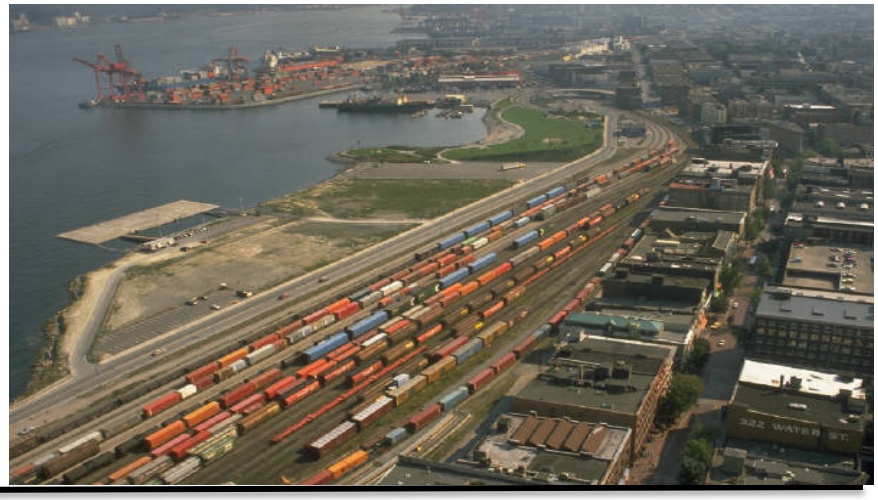
Overview:

- Recent Crude Oil Accidents
- Emergency Orders and Safety Advisories
- Regulatory Initiatives
- Future Regulatory Approach



FEDERAL RAILROAD ADMINISTRATION

Railroad Safety Advisory Committee

U.S. Department of Transportation
Federal Railroad Administration

Recent Crude Oil Accidents

April 30, 2014:
Lynchburg, VA

- 17 CSX Transportation cars carrying crude oil from North Dakota to Virginia derailed in Lynchburg, VA

Recent Crude Oil Accidents

April 30, 2014:
Lynchburg, VA

- 1 car breached
- No injuries reported
- Approximately 350 people forced to evacuate for 3.5 hours

Crude Oil Accidents in May 2014

U.S. Department of Transportation
Federal Railroad Administration

- May 26, 2014–BNSF Railway, York, ND
- May 20, 2014–Canadian Pacific Railway, Albany NY
- May 12, 2014–Canadian Pacific Railway, Albany, NY
- May 9, 2014–Union Pacific Railroad, LaSalle, Co
- May 8, 2014–BNSF Railway, Brownwood, TX

Emergency Orders/Safety Advisories

U.S. Department of Transportation
Federal Railroad Administration

MOST RECENT: May 7, 2014

- Emergency Order DOT-OST-2014-0067:

  Requires Railroads to notify state emergency response commissions regarding the operation of crude oil trains passing through their state.

- Safety Advisory 2014-01:

  Recommends that crude oil be transported in the safest tank cars possible (when practical).

Emergency Orders/Safety Advisories

- Safety Advisory 2013-07: November 20, 2013

  Safety and security plans for Class 3 hazardous materials transported by rail.

Emergency Orders/Safety Advisories

- Emergency Order No. 28: August 7, 2013

  Emergency Order establishing additional requirements for attendance and securement of certain freight trains and vehicles on mainline track or mainline siding outside of a yard or terminal.

- Safety Advisory 2013-06: August 7, 2013

  Addresses preventing unintended movement of freight trains and vehicles on mainline track or mainline siding outside of a yard or terminal.

Emergency Orders/Safety Advisories

…. and there have been other initiatives

- Railroad Safety Advisory Committee (RSAC) Emergency Meeting – August 29, 2013
- “Call to Action” Meeting with Industry and voluntary initiatives
- RSAC Working Group Meetings

Regulatory Initiative - RSAC

- Securement Working Group
  - Work completed
  - RSAC Committee approved consensus regulatory text recommendations on April 1, 2014
- Hazmat Issues Working Group
  - Consensus reached on four items
  - RSAC Committee approved consensus recommendations on April 8, 2014
  - Letter from ROA to PHMSA in development

Regulatory Initiative - RSAC

- Train Crew Size
  - Consensus not reached
  - Input from stakeholders will inform the proposed rule
  - Developing Rule Text to be issued as an NPRM this Fall

Future Regulatory Approach

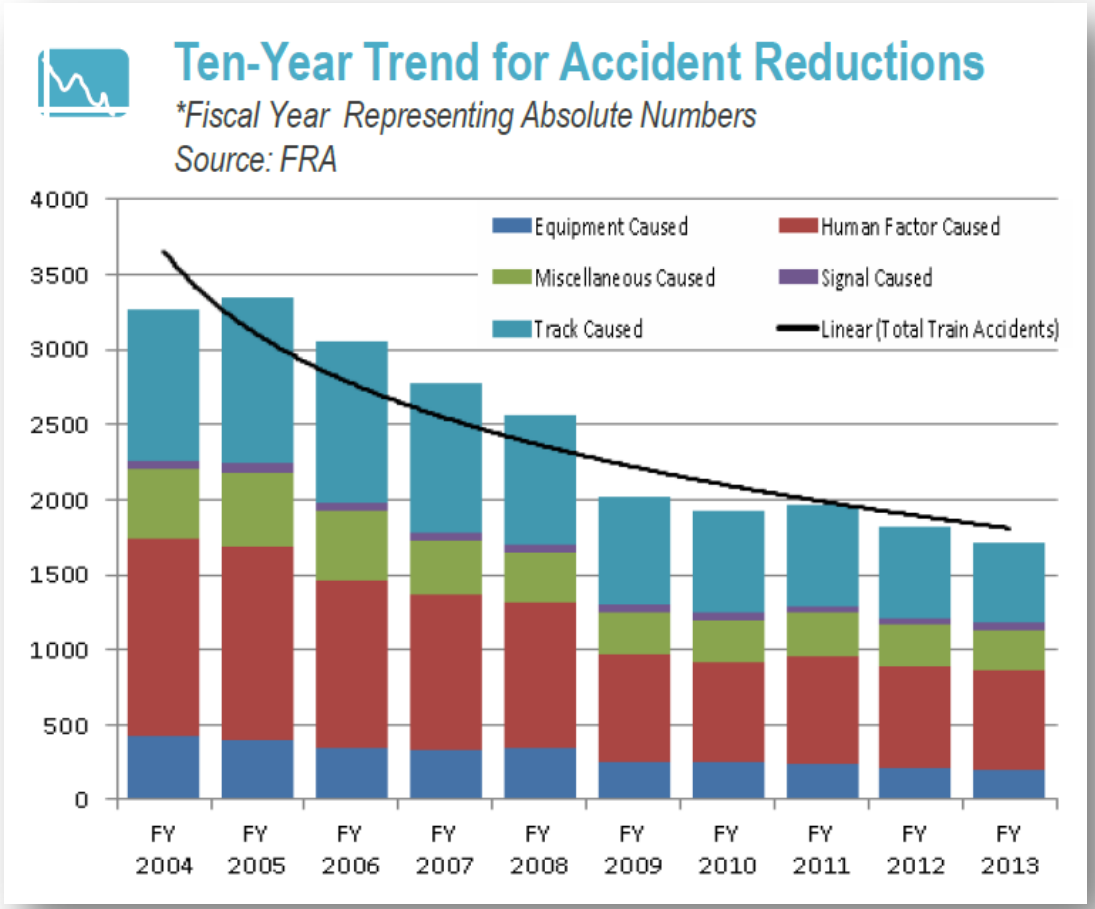
U.S. Department of Transportation
Federal Railroad Administration

Safety is our Number 1 Priority

Rail Has Never Been Safer

Every regulation and enforcement action we issue is based on facts and sound research. New records in safety have been achieved four of the past five years.

- Over the past decade, train accidents have declined 47 percent
- Highway-rail grade crossing accidents are down 35 percent
- Employee fatalities have been reduced by 59 percent

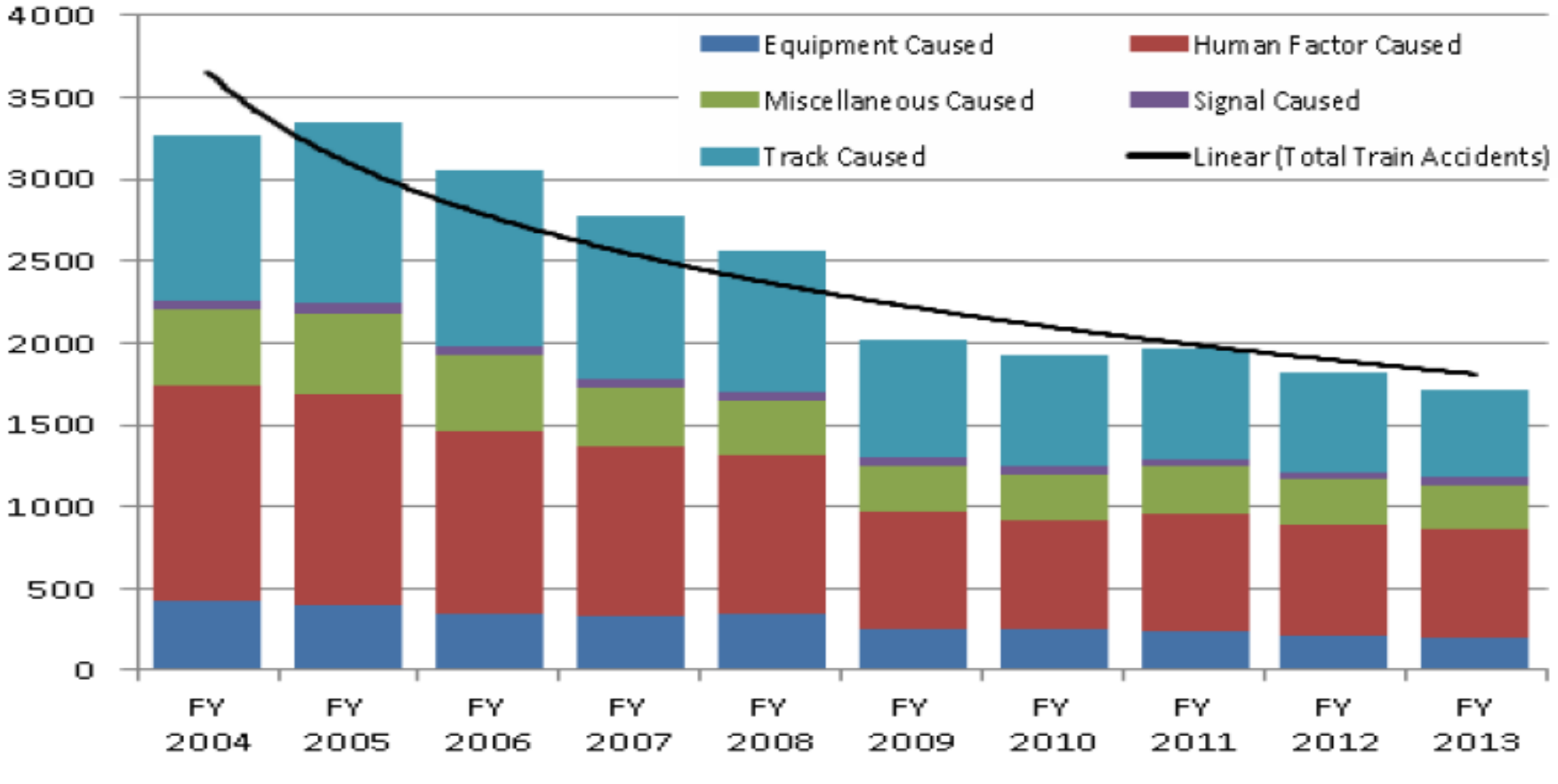


U.S. Department of Transportation
Federal Railroad Administration

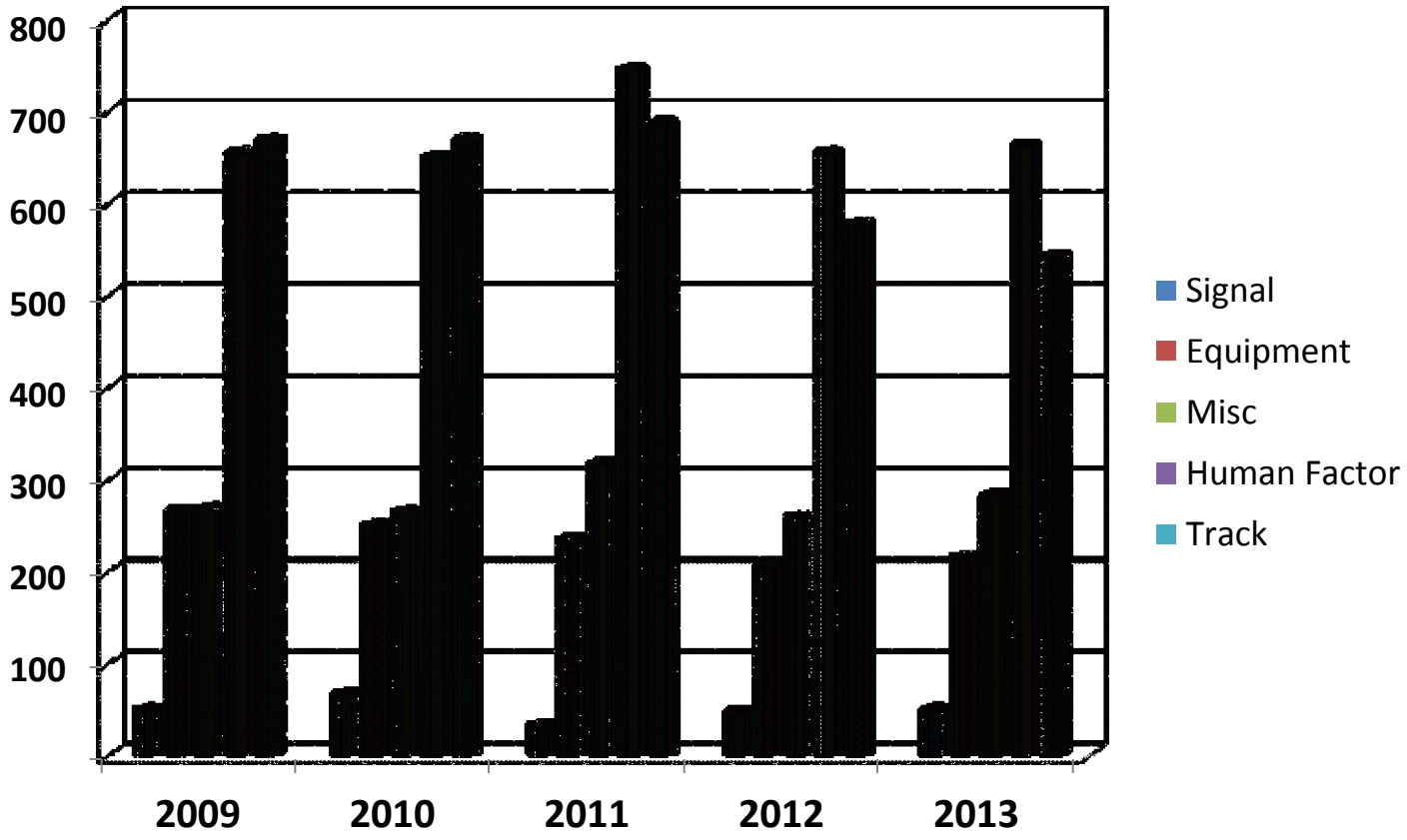
Ten-Year Trend for Accident Reductions

**Fiscal Year Representing Absolute Numbers*

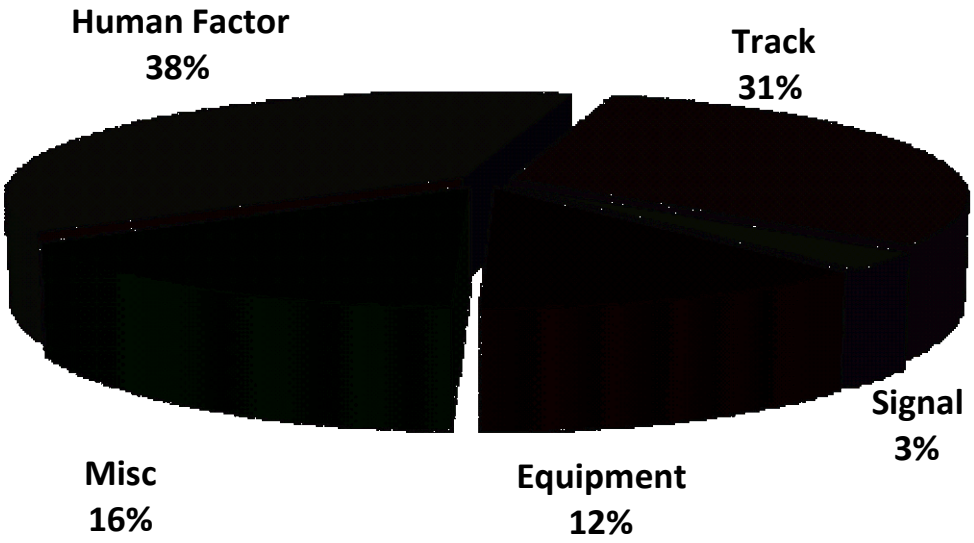
Source: FRA



Train Accidents by Disciplines



2013 Train Accident by Disciplines



[e.g., vandalism,
natural disasters]

Track Safety Strategy

- Short-term Actions
- Mid-range Objectives
- Long-term Goals

Track Safety Strategy

Short-term Actions

- Focused Audits of Track Maintenance practices
- Engagement with railroads and inspectors – minimum standards versus best practices.
- Safety Advisories to identify areas of risk and ways to mitigate.
- Better use of FRA enforcement tools – violations, fines, special notice of repair, other strategies.

Track Safety Strategy

Mid-Range Objectives

- RSAC Rail Integrity Working Group
- Complete review of existing Track safety standards
- Removal of disincentives to test or inspect.
- Rewrite of the existing track safety standards to “raise the bar.”

Track Safety Strategy

Long-Term Objectives

- Develop Autonomous track inspection technology
- Require continuous testing on revenue trains
- Perform trending analysis
- Support the technology roll out with appropriate regulations

FRA Regulatory Summary

Expect some New Regulations that impact Crude Oil Transportation

- Securement Issues
- Hazardous Material Issues (with PHMSA)
- Train Crew Size
- Track Integrity Modifications
- Updated Track Safety Standards

NOTE: PHMSA is working on other regulatory requirements.

QUESTIONS?