

Workplace Behavior and Rule Compliance: Industry & Regulatory Perspective

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Overview

- Historical perspective
- Current environment
- NTSB recommendations
- Federal Role
- Partnership
- Take away



Historical rules development: “Rules made in blood”

- Lack of forethought
 - *Ad hoc* approach is reactive and limiting
- Lack of formality
 - “Word of mouth” rules
- Lack of analysis
 - “The way we do things around here”
- Difficult to test and measure compliance

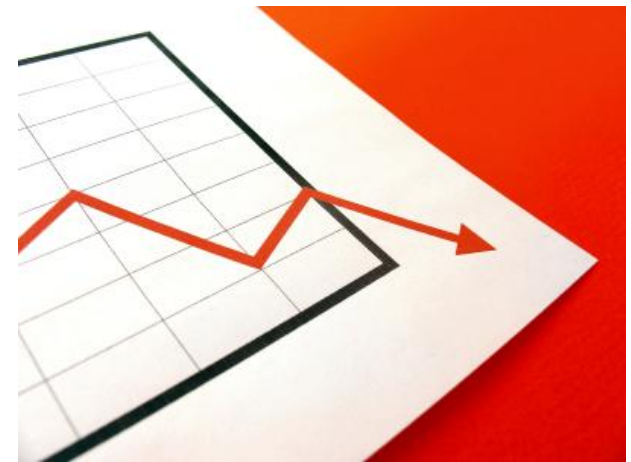


Impacts of old philosophy

- High-profile and tragic accidents
- Gap between those that make the rules and those that carry them out
- Risk potential was unknown
- “Gotcha” mentality

Changing Safety Environment

- A series of accidents have captured public and media attention
 - Distracted driving bus accidents
 - Failure to stop at red light accidents
- Transit cannot fulfill its mission if the public does not perceive it as safe





Current environment

- Rule violations are contributing to serious accidents investigated by the NTSB:
 - May 8, 2009 MBTA Green Line Collision (Cell phone use; violation of operating rules)
 - July 18, 2009 Muni Collision (Failure to follow operating rules for entering portal)
 - September 12, 2008 Metrolink Collision near Chatsworth (Cell phone use; violation of operating rules)
 - May 28, 2008 CTA derailment (Failure to follow operating rules)
 - **May 28, 2008, Okaloosa County School District Bus Rollover (Failure to maintain lane)**
 - January 9, 2007 MBTA Commuter Rail Collision with Work Train (Failure to follow operating and maintenance rules)
 - July 11, 2006 CTA Derailment (Failure to follow maintenance rules and standards)



NTSB

- NTSB findings
 - Operating and maintenance rules not being followed
 - Inadequate oversight of rules compliance
- NTSB recommendations
 - Frequent unannounced compliance checks
 - Use hazard analysis to identify training to improve employee compliance with safety rules and procedures



Current regulatory structure

- General requirements for rules compliance programs in the rail transit environment
 - State safety oversight (SSO) program
 - Operating and maintenance rules checks program required for front-line and supervision
- ***Voluntary*** compliance program for bus and paratransit



Federal and industry actions

- FTA' s Transit Bus Safety and Security Program
- FTA' s State Safety Oversight Program
 - Increase regulatory oversight in rail transit
 - Increase focus of audits of rail properties
- APTA' s Standards Program



Research

- TCRP A-34 “Improving Safety-Related Rule Compliance in the Public Transportation Industry”
 - Purpose: to identify proven approaches in transit and other safety-critical industries that can be implemented by public transportation
 - Scope:
 - Focus is primarily on those safety or operating rules that are designed to prevent high consequence events
 - Review of safety reporting systems



TCRP A-34 Research Process

- Comprehensive literature and research review of safety-related rule compliance
- A review of accident reports that identified errors or rule violations as causal or contributing factors
- Structured interviews with safety officials (transit and other industries)
- Identify approaches for preventing and managing noncompliance
- Select best practices for improving safety-related rule compliance in the transit industry based on applicability to transit

TCRP A-34 Rules compliance practices



- Initial rules communication
- Communicating new rules
- Validating rules comprehension
- Monitoring adherence
- Responding to non-compliance
- Encouraging compliance
- Evaluating program effectiveness
- Safety reporting mechanisms

TCRP A-34 Recommended next steps



- Key support for TCRP A-35 “Improving Safety Culture in the Public Transportation Industry”
- Identify stakeholders and form steering committee to get “buy-in”
- Pilot program
- Make program available to the entire industry

Dissemination

- TCRP A-34 Interim Report disseminated to industry in “Dear Colleague” Letter from Administrator Rogoff in December 2010

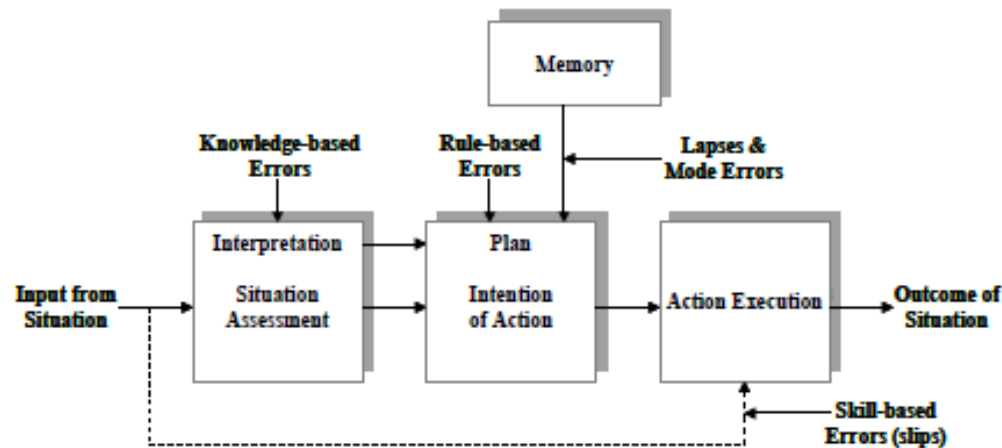


Figure 1. Information processing model of human error



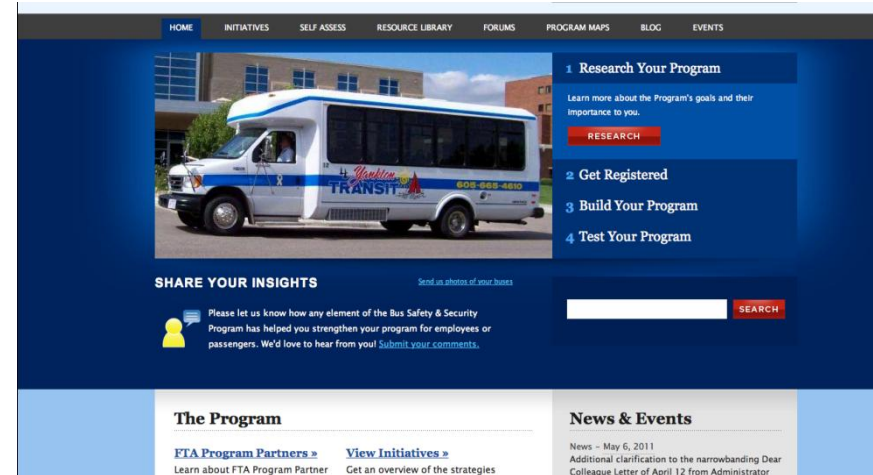
FTA's Bus Safety and Security Program

- Partnership with APTA, CTAA and AASHTO
- Voluntary program – focuses on technical assistance
- Three key components:
 - Voluntary onsite reviews
 - State DOT orientation seminars
 - Resource website

Bus Safety and Security Technical Assistance



- Over 1,000 resources
- 800 registered users
- Tools, templates, policies, procedures
- Online assessment tool
- Case studies
- *Supervisor ride-along video*



Voluntary Bus Safety & Security Program



- Challenges remain
 - Lack of regulatory authority
 - Lack of Safety Culture



FTA' s State Safety Oversight Program

- FTA' s 49 CFR Part 659.17(m) requires:
 - a description of the processes used by the rail transit agency to develop, maintain, and ensure compliance with rules and procedures having a safety impact. This must include:
 - Identification of operating and maintenance rules and procedures subject to review;
 - Techniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing;
 - Techniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules; and
 - A process for documenting results and incorporating them into the hazard management program.



State Safety Oversight Audits

- Increasingly, rail systems are dedicating resources to rules compliance programs
 - developed standards for managing employee efficiency checks
 - conducting unannounced inspections and audits of employee work activities
 - Positive reinforcement techniques for addressing rule violations when they occur are being used
 - Technological solutions and systems are being deployed to support performance measurement



State Safety Oversight Audits

- Challenges remain for implementation
 - Programs are not comprehensive
 - Criteria do not address safety critical rules
 - Limited resources are negatively affecting initial training and refresher training
 - Employees do not routinely participate in rule making or rule change process
 - Limited analysis of rules violations make it difficult to determine overall risk



APTA's Standard for Rule Compliance

- APTA Rail Transit Standards Operating Practices Committee
- Approved January 30, 2004
- APTA Rail Transit Standards Task Force
- Authorized June 6, 2004
- APTA Rail Transit Standards Executive Committee



APTA's standard

- Applies to rail transit systems that operate light rail and heavy rail systems
- Emphasizes that operating rules are created to promote safe, efficient, timely, and customer-oriented transit
- Promotes a process to achieve these objectives through adherence to operating rules
- The standard outlines the basic elements of a rule compliance program needed to verify adherence to operating rules



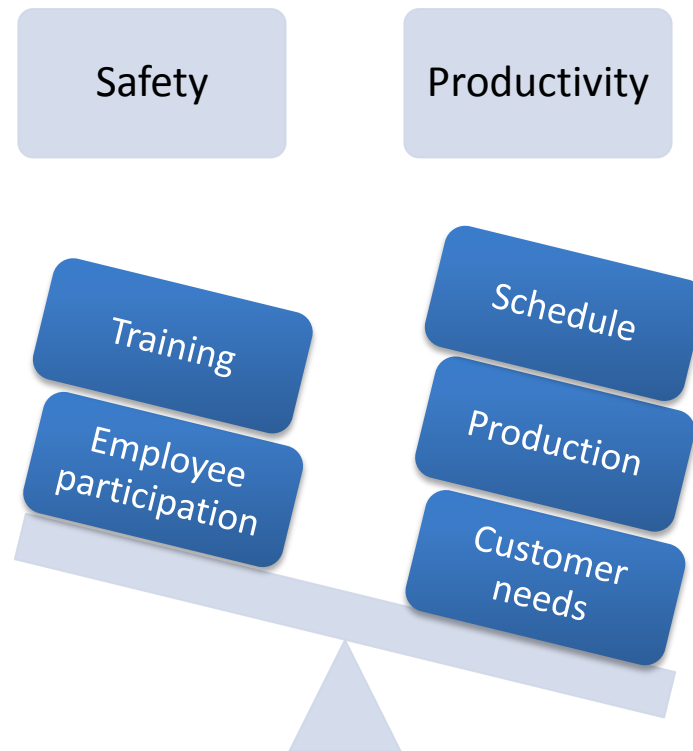
Next Step

Partnership

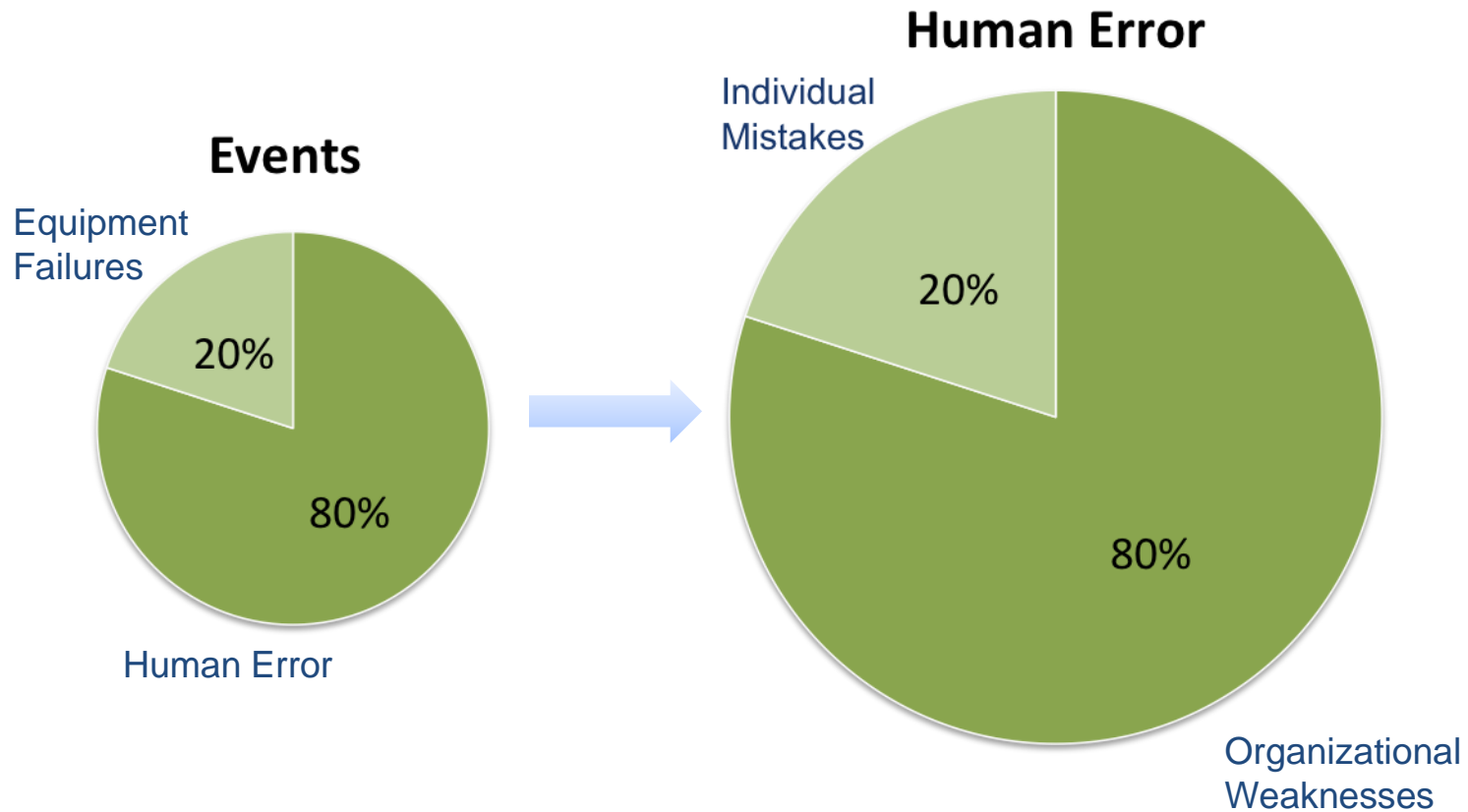
- FTA, states, industry associations all need to work together to:
 - Identify the problems and issues
 - Analyze methods for implementation
 - Partner in solutions
 - Support ongoing improvements
- Management and labor will have to work together
- One size does not fit all, so we will need solutions that can be tailored

Management Philosophy

- Balance safety and productivity



Where is the issue?



Source: DOE "Human Performance Improvement Handbook" June 2009



Take away

- Principles can be applied across modes
 - Management commitment
 - Labor/management cooperation
 - Employee involvement and participation
 - Fair and just approach
 - Positive reinforcement



Safety Culture

- International Transit Mission Study 2003
- On Transit Design, Construction, And Operations In The Mediterranean Region
- 12 Participants
- Individual Trip Report
- Safety & Security Report