Initiatives to reduce transit damage

Industry

- Association of American Railroads
- Transportation Technology Center Inc.
- Technology

CSX Internal

- Workshops
- Equipment replacement and upgrades
- Terminal Studies
- JD Power Survey feedback
Association of American Railroads

- Seven Class One Railroads
- 175 Damage Prevention Professionals
- Loading Methods tested in 2013
  - Impact Test 31
  - VTU 2
  - Field Test 11 with 6 others in process
Transportation Technology Center Inc.
Vibration Test Unit (VTU) at the TTCI
Web of Detectors – Joint Wayside Diagnostic System

Goal – Proactive identification of mechanical risks to minimize line of road stops
- Eliminate mechanical-caused line of road stops and derailments
- Reduce the stress state of our Railroad
- Centralized repository for ALL detector data
- Identifies and prioritizes conditions we want to know
- Enables car inspectors to move from finders to fixers

CSX, UP and NS share software and rules logic through the JWDS Consortium
Technology

The Web of Detectors
Wheel and Bearing Temperature Detector
Hot Bearing Detector
Wheel Profile Detectors
Machine Vision
Optical Geometry Detector
Acoustic Bearing Detector
Wheel Impact Load Detector
Thermal Wheel Imaging
Today, 706 HBD's are networked and trending, and we are adding more as we replace older equipment...
Technology

Our Supersites have co-located equipment
Technology

- Wheel Impact Load Detector - prevents vertical forces to the load.

This wheel was measured with 153,000 pounds of force banging on the rail with every rotation.

This wheel shows initial flat spots developing.
Optical Geometry Detector—measures conditions that cause lateral impact in the load.
Technology

- Machine Vision

Missing bolts

 Taken at track speed
Technology

- Networked Hot Bearing Detector Data
CSX Initiatives
CSX LEADS has 3 main responsibilities

- Work with Customers to design efficient, cost effective loading methods that enhance safe transportation while protecting the assets of all parties involved.

- Handle distressed lading events (derailments, load shifts, load transfers, etc.) minimizing lading loss and expenses. Data analysis to identify and correct issues.

- Resolve loss and damage claims and lawsuits promptly and equitably.
Workshops

- Workshops conducted on site
  - Customer request
  - Recurring damage issues
  - Trend analysis
- Workshop topics
  - Proper loading techniques
  - Rail equipment
  - Rail environment – line of road and terminal
  - Damage identification and documentation
- 29 workshops YTD with 439 attendees
Proper equipment is one of the keys to success

- **Upgrades to Class A status**
  
<table>
<thead>
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<th>Year</th>
<th>Quantity</th>
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<tbody>
<tr>
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<td>400</td>
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<tr>
<td>2012</td>
<td>500</td>
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<tr>
<td>2013</td>
<td>400</td>
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- **Investments**
  - 900 additional 50 foot boxcars
    - high cube
    - high capacity
    - single door
  - 1500 60 Foot boxcars as part of the NABP pool
Accurate reject information enables corrective action

• Customer rejects equipment via ShipCSX or DDCT
• Customer assigns **accurate** reject code
• CSX then ensures routing to proper car repair facility
• Status determined at car repair facility
  • repaired or,
  • designated for an upgrade or,
  • removed from paper service
Terminal Studies increase awareness

- Conducting at top 10 terminals
  - highest incident volume
  - railroad caused
- Record a minimum 100 radar readings of coupling speeds
- Determine ratios of coupling speeds
  - below 4 MPH
  - between 4.1 and 6 MPH
  - over 6 MPH
- Exit meetings review results and develop action plan
- 22 studies YTD
Follow-Up Process:

• Contact customers giving scores of 7.0 and below

• Analyze survey results and customer feedback for corrective actions

• Use the feedback as opportunity to improve customer relationships
Brief Review

- 7 Class One Railroads 175 Damage Prevention Professionals
- Product Testing at the Test Center
- New Technology
- CSX On Site Workshops
- Investment in Equipment
- Terminal Studies to address Handling Issues
- J D Powers Feedback from Customers
LOADING QUESTIONS

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I don’t have all the answers but I know somebody that does.
AAR Damage Prevention and Freight Claim Conference

June 30th – July 2, 2014

Rosen Shingle Creek Resort
Orlando Florida

HTTP://WWW.REGONLINE.COM/DPFC2014
Questions?