



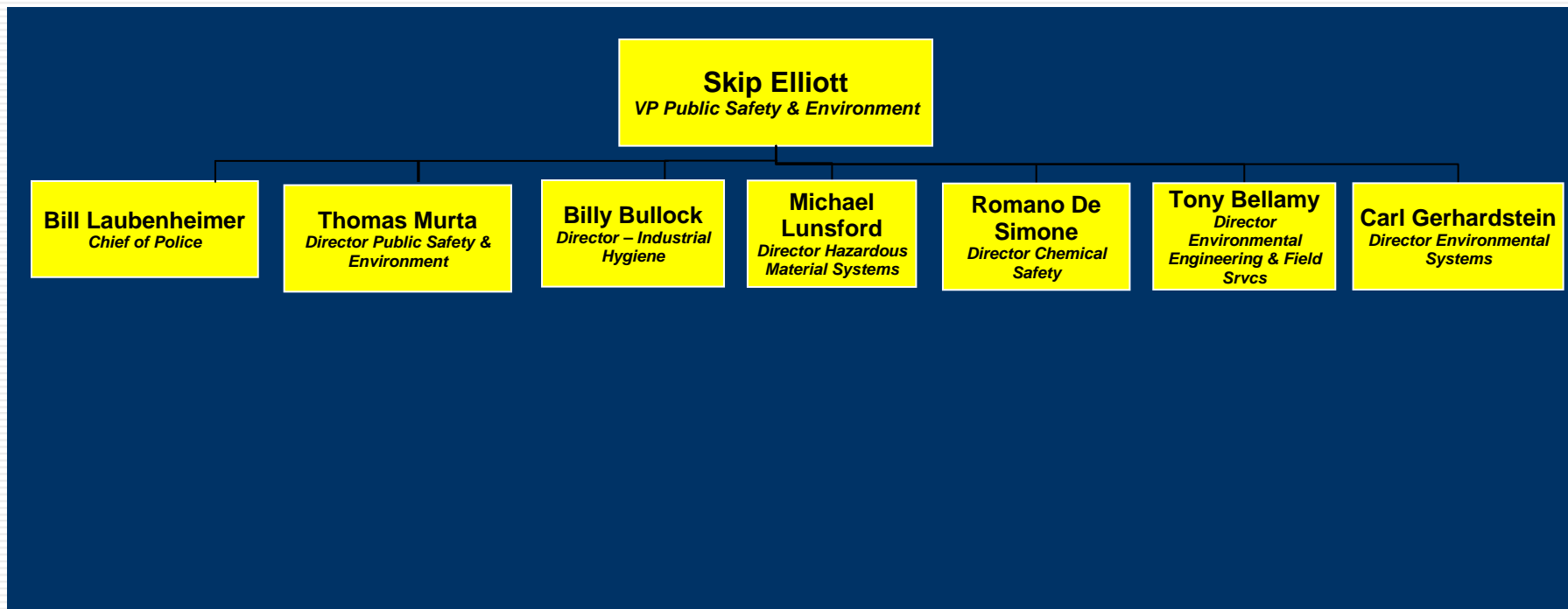
CSX Transportation

M. D. Lunsford CSP CHMM
Director - Hazardous Material Systems

CSX Transportation Facts

- Largest railroad east of the Mississippi
- 21,000 route miles of track
- 1,100 trains per day
- 4,000 locomotives
- 80,000 freight cars
- Serve the following:
 - 45 automobile distribution centers
 - 165 bulk intermodal and truck transfer terminals
 - 125 coal mines and 105 coal-fired power plants

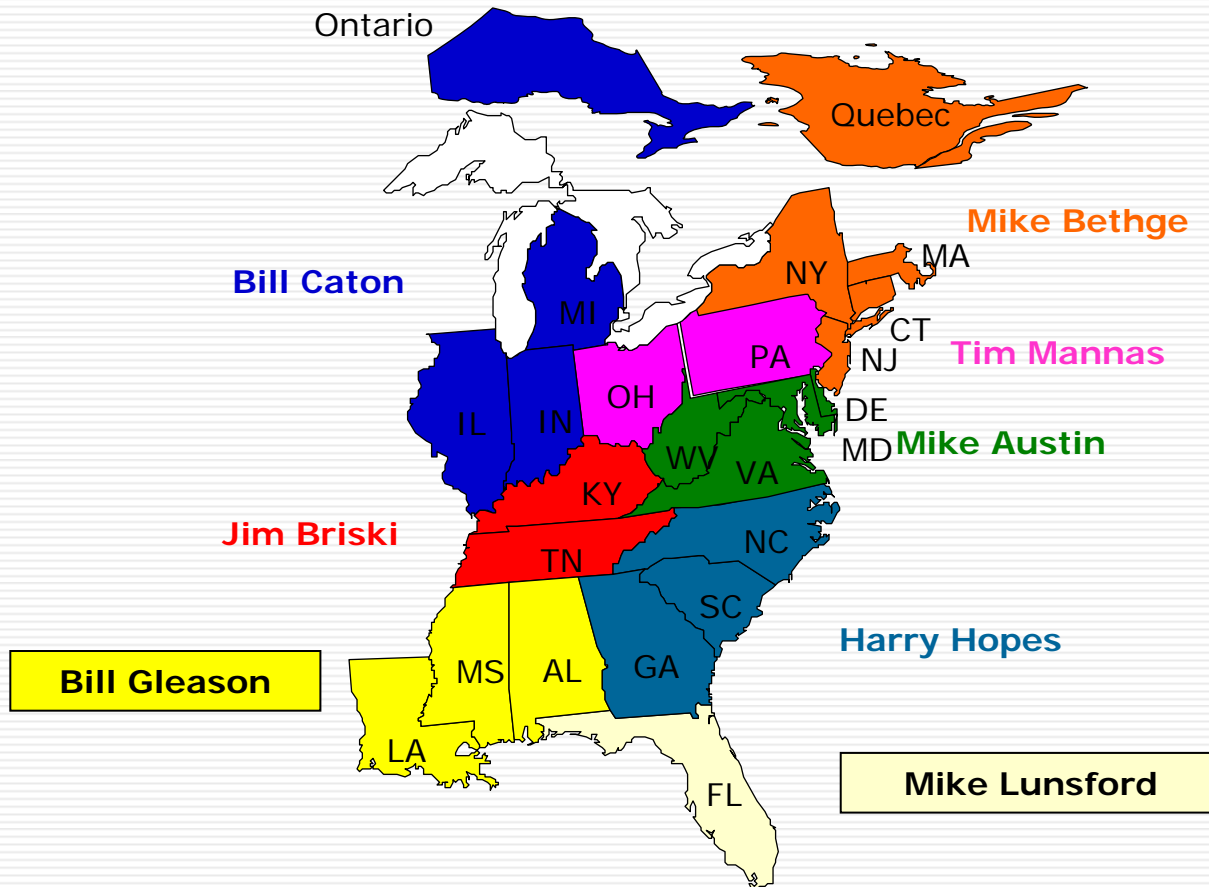
Public Safety and Environment



Hazardous Materials and Chemical Safety

- Respond to and abate hazardous material emergencies
- Emergency pre-planning and EMA liaison
- Training for public agency emergency responders
- Training for CSX employees and customers
- New business review and hazard evaluation
- Regulatory type inspections and compliance reviews

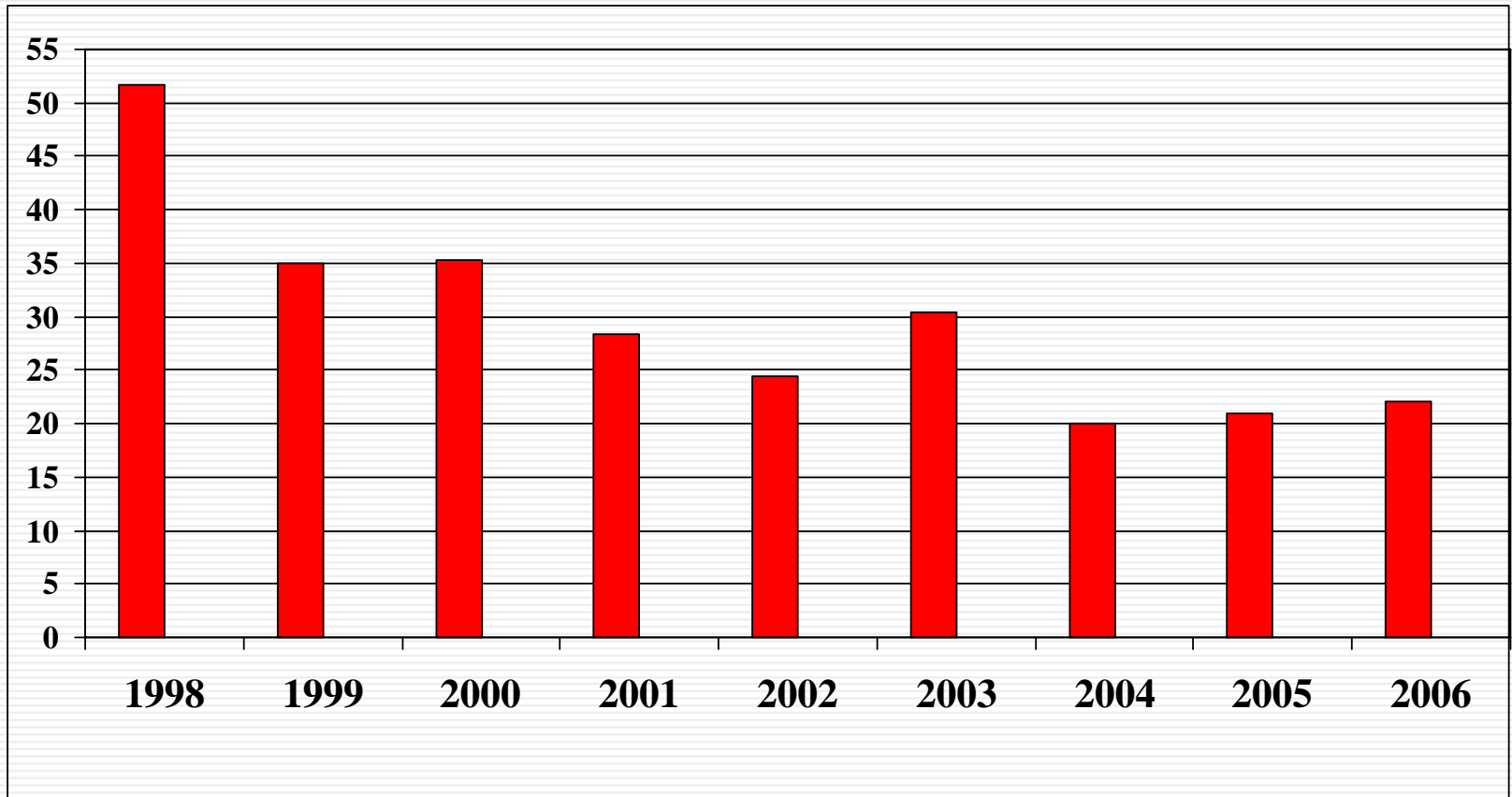
CSXT Hazardous Material Systems Field Services Managers



Hazardous Material Safety

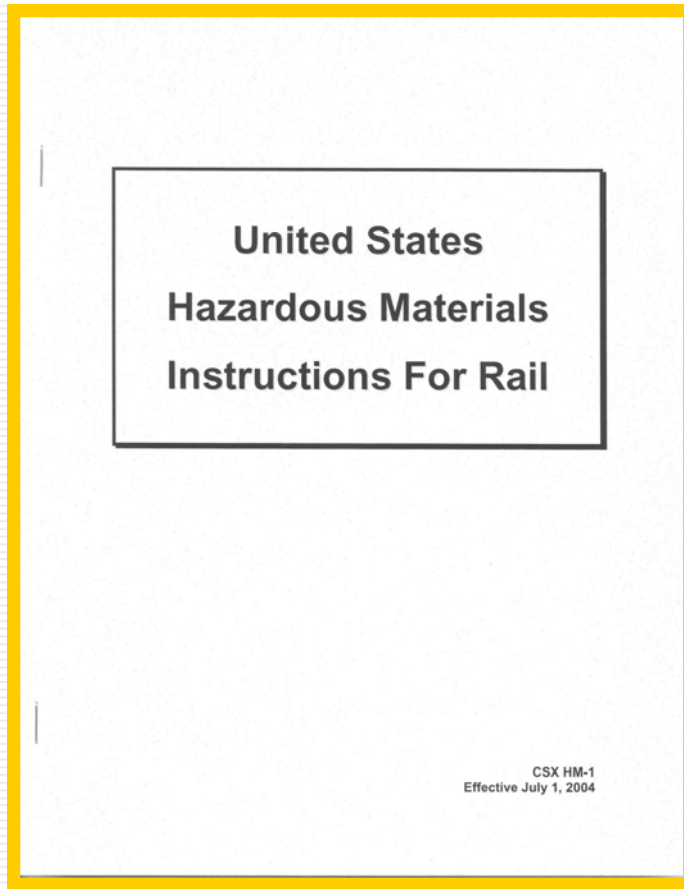
- 99.996 percent of rail hazmat shipments reached their final destination without a release caused by an accident.
- Overall hazmat accident rates have fallen 87 percent since 1980 and 34 percent since 1990.
- In 2006, CSXT transported approximately 350,000 carloads of hazardous materials, of which only 10 spilled any contents due to derailment.
- Railroads are “Common Carriers”

CSXT Incident Rate Hazmat Releases Per 100,000 Carloads



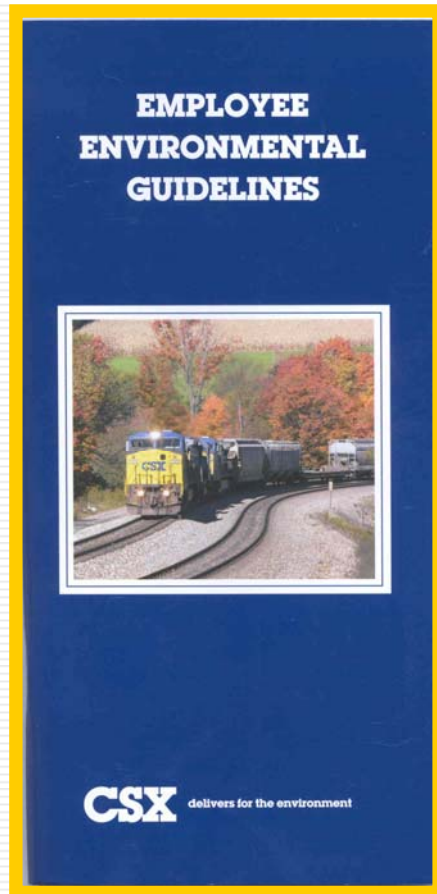
Note: 95% of incidents involve non-accident releases from tank cars

Hazmat Rules for Operating Employees



Adopted by all Class 1
Railroads

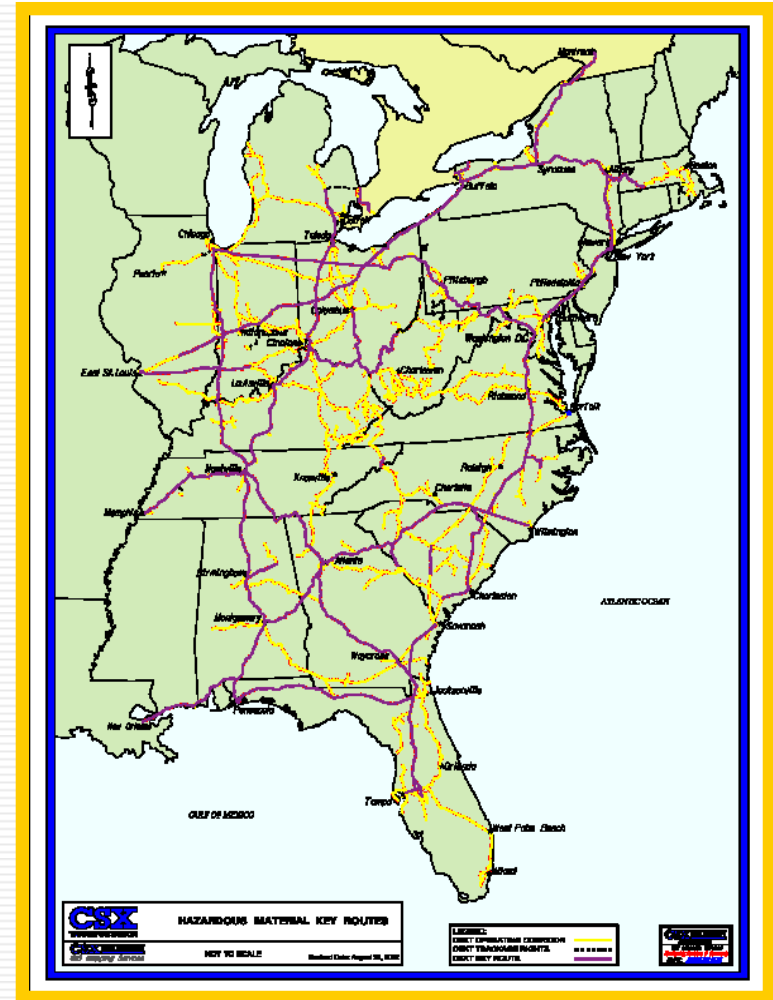
Environmental Guidance for Employees



- Handy reference for doing the “Right Thing”
- ~14,000 Distributed to Mechanical & Engineering Crafts

Key Routes

- Wayside detectors spacing
- Increased Inspection Intervals



Contractor & Consultant Reviews

- Independent Consultant
 - Auditing
 - Financial
 - Operation
 - Safety
 - Training
 - Process Improvement
 - Pre-selection Reviews
 - Approximately 15 reviews per year
 - Adjustments and recoveries are approximately 45% of consultant costs

Top Ten Hazardous Materials Transported by Rail

• Ethanol	Class 3
• Sodium Hydroxide	Class 8
• Liquefied Petroleum Gas	Class 2.1
• Molten Sulfur	Class 9
• Sulfuric Acid	Class 8
• Anhydrous Ammonia	Class 2.2
• Chlorine	Class 2.3
• Asphalt	Class 9
• Ammonium Nitrate Fertilizer	Class 5.1
• Ethylene Glycol	Class 9

Incident Management Preplanning

- Internal Crisis Management Exercises
- External Crisis Management Exercises
- Emergency Responder Training
- CSX HAZMAT Sentinel Program
- Preferred Response Contractor Program
- RATS Environmental Assessment Teams
- TestNET Air monitoring Program

Incident Management Preplanning

- Transportation Emergency Response Plans for terminals and line-of-road
- Community Awareness Emergency Planning Guides
- Annual planning/training meetings with all support groups
- Incident recovery planning and training
- Staged equipment and materials

Advanced Response Programs

- TestNET® Air Monitoring
 - For public and employee safety
 - 20+ locations
 - Identical kits and annual training
 - Equipment based on top 25 rail hazmat shipments
- Rail Accident Technical Support (RATS) teams
 - Four primary support consultants
 - Advanced training in rail response
 - Available to respond with water and soil testing equipment
 - Can deploy for short or long term events

Network Operating Workstation

The screenshot displays the Network Operating Workstation (NOW 1.0) interface. The main window shows a map of the Eastern United States with a complex rail network. The map is overlaid with various colored lines and markers, including blue lines for main routes and green/yellow markers for specific train locations. The map is framed by directional arrows: NORTH, SOUTH, WEST, and EAST.

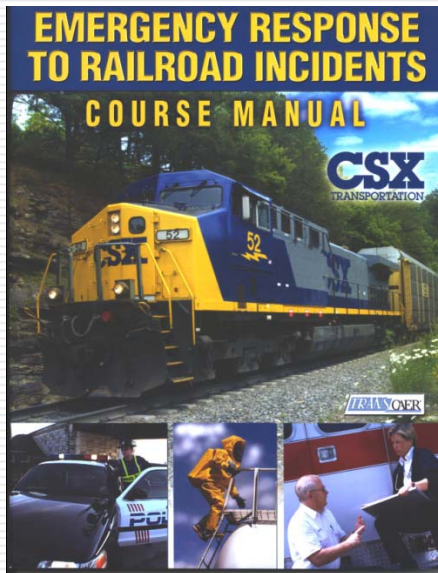
The interface includes a menu bar at the top with the following options: Alerts, View, Train, Terminal, Yard, Car, Locomotive, Customer, Public Safety, Window, and Help.

On the right side, there is a control panel with several sections:

- Security Trains Select:** A list of radio buttons for selecting train categories:
 - No Trains
 - Alert Trains
 - Key Trains
 - Military Trains
 - RSS Trains
 - RAGES Trains
 - All Public Safety Trains
- Alert Trains STCC Category Filter:** A dropdown menu currently set to "All Alert Trains".
- Options:** A checkbox labeled "Only Show Hazmat Trains" which is checked.
- Totals:** A summary box showing "Total Trains Found: 74" with a green circle icon.

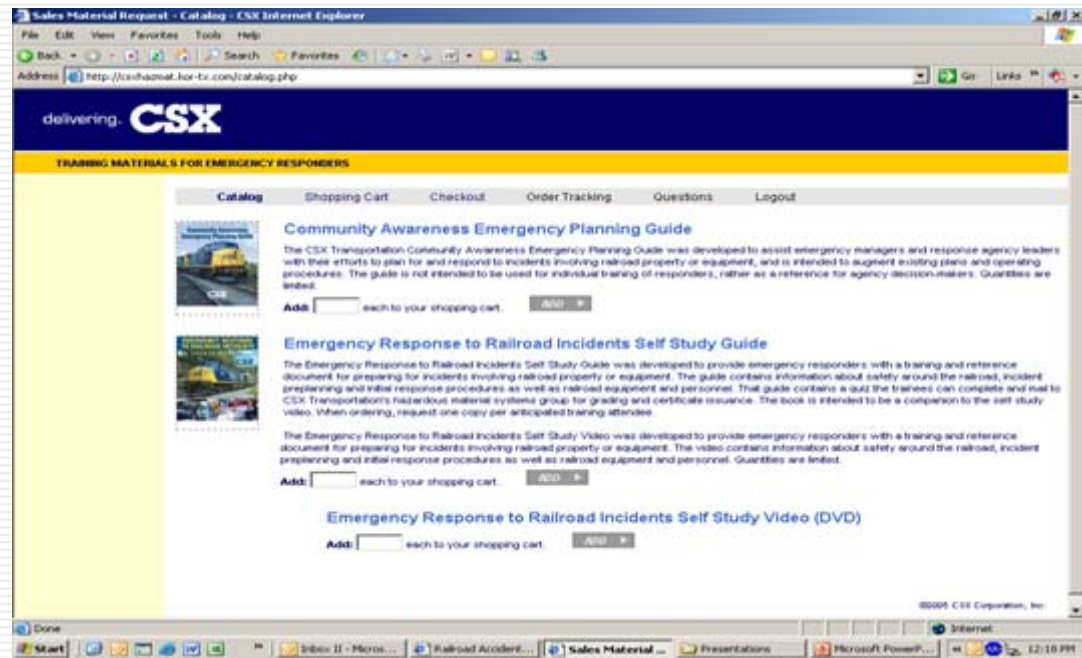
At the bottom right, there is a small inset map of the United States and three buttons: "Standard View", "My Profile", and "My Alerts".

Training for Emergency Responders



Over 60,000
books and videos
distributed

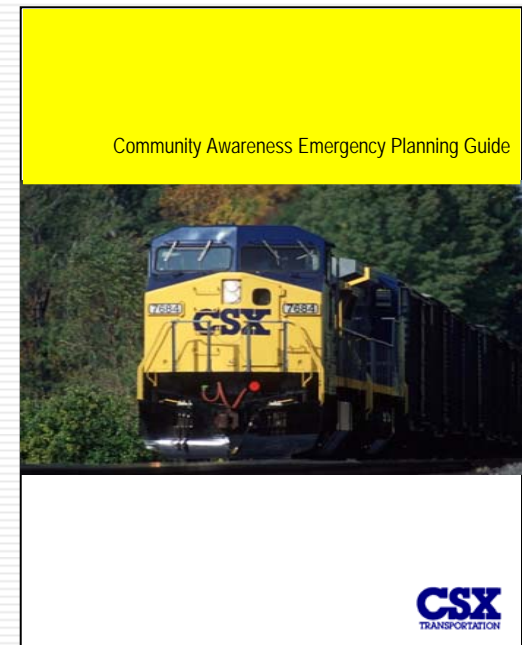
Award winning video & workbook
based self-training program
<http://csxhazmat.kor-tx.com>



Planning Guide for Communities & Emergency Responders

- Over 13,000 distributed
- Fire
- Police
- Emergency Management
- Homeland Security
- Fourth Edition distributed in Fall 2006

<http://.csxhazmat.kor-tx.com>



Challenges – Present and Future

- Urban Hazmat Re-routing Initiatives
- New Tank Car Designs
- Security Initiatives
- Enhancing Responder Training
- Ethanol Production Surge
- Changing Population Demographic