



BNSF RAIL SAFETY OVERVIEW

APRIL 27, 2016
LAKEWOOD, WA



BNSF's Safety Overview

- Rail is safest mode of land transportation.
- BNSF's safety vision is to prevent accidents in the first place.
- BNSF has a broad-based risk reduction program.



Prevention

Mitigation

Response

Prevention

Bridge and Track Inspections

BNSF inspects tracks and bridges more often than required by FRA

- Most BNSF key routes inspected **four times weekly** and **busiest daily**
- Geometry car inspections performed **at least two times** on crude oil routes annually



Increased Rail Detection Testing Frequencies Along Critical Waterways

Increased rail detection testing along critical waterways from the FRA frequency of twice annually to **2.5 times in April 2015**

Equipment Detection Technology

- More than 2,000 trackside detectors
- **10 mile spacing** along the Columbia River

Speed Restrictions

50 MPH and 35 MPH in Populations > 100K

Positive Train Control (PTC)

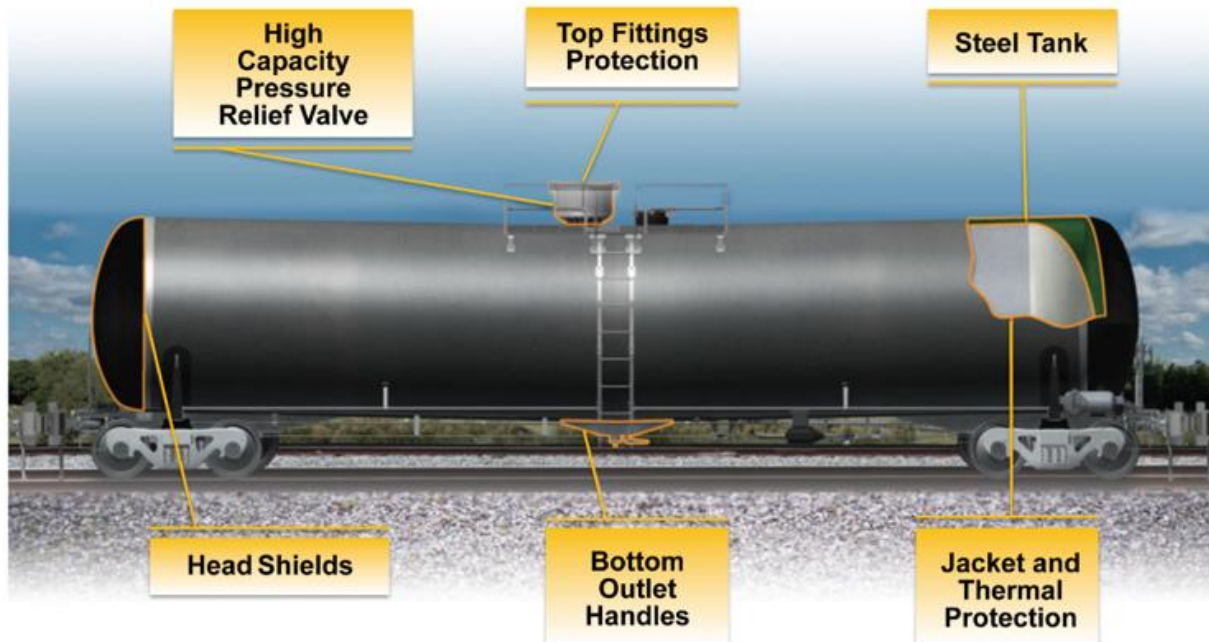


Mitigation: New Tank Car Standards

Tank Cars for High-Hazard Flammable Trains (HHFT)

New tank cars built after Oct. 1, 2015, must meet enhanced DOT 117 design or performance criteria for HHFT:

- Increased thickness from 7/16 inch to 9/16 inch steel
- Thermal protection required
- Jacketing with minimum 11-gauge steel and weather-tight
- Full-height Head Shield - 1/2-inch thick

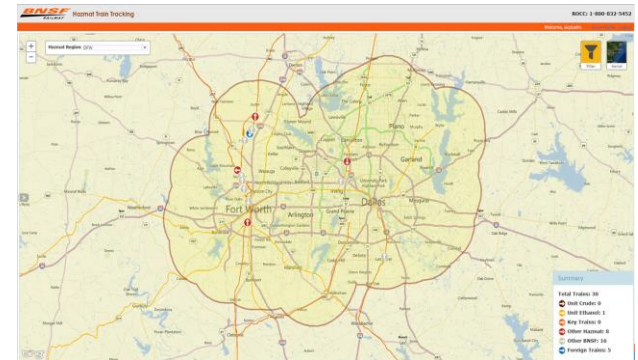


Response: First Responder Access to Information

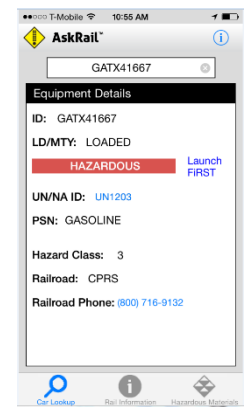
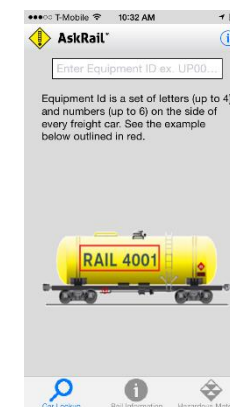
Historically, BNSF has provided local first responders information about hazmat shipments upon request.

Today we go even further

- Since July 2014, BNSF provides **State Emergency Response Commissions with Bakken crude traffic train counts** on transport of 1 million+ gallons.
- BNSF **offers SECURETRAK** website, a real-time Geographic Information System tracking program, to state and/or regional fusion centers.
- Industry **launched AskRail app** to provide first responders with car-specific data for hazmat contents and railroad contacts during incident.
- BNSF **developed national inventory of resources** for first responders, staging of emergency response equipment and community notification contacts.
- BNSF launched www.BNSFHAZMAT.com website to provide information such as training and emergency response plans to first responders.



SECURETRAK Website



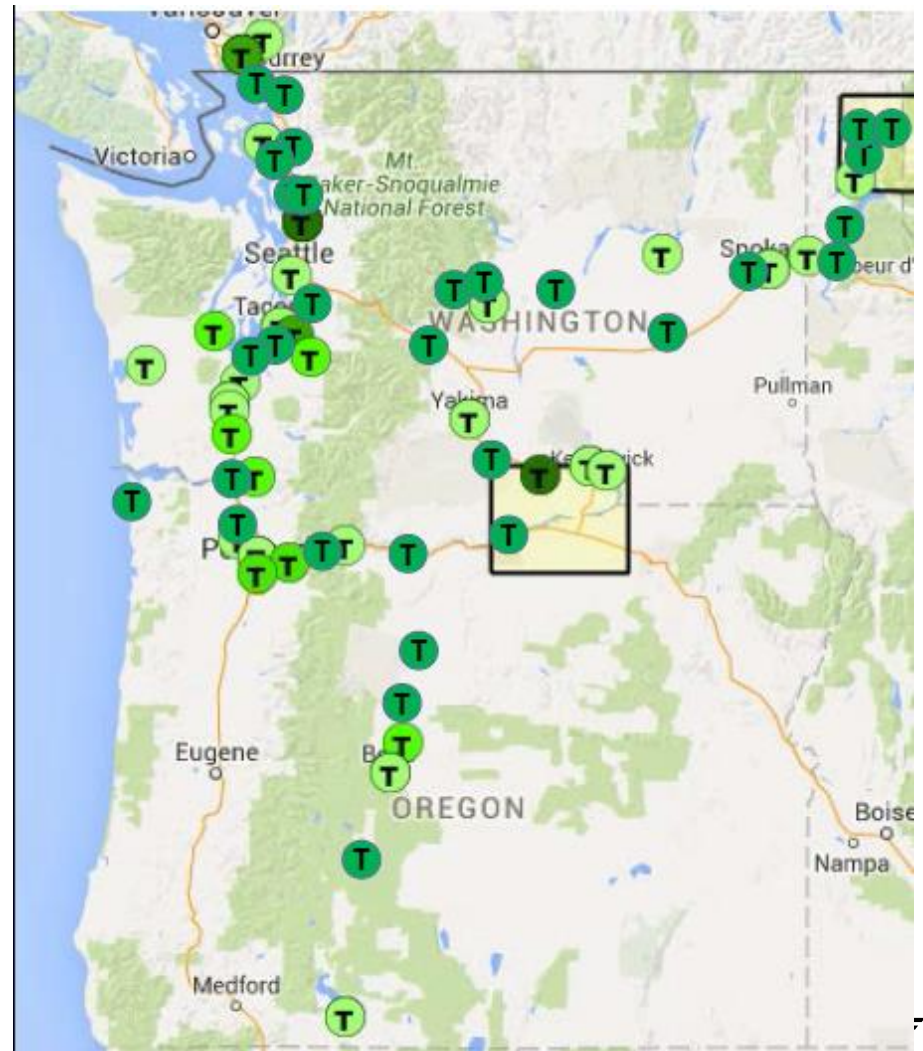
AskRail App

Response: Hazmat Training

2013 to Current - Trained over 3500 responders in the PNW

Sponsored 1st responders to attend a 3 day CBR ER Class

- **2014 = 204**
- **2015 = 115**
- **2016 (scheduled) = 44**



ER Equipment Allocation in NW

Locate specialized equipment (oil spill containment booms, hydraulic skimming systems, oil recovery bladders and other equipment which has traditionally not been found in inland locations.

