

Freight Rail Safety in our Communities: **Delivering safety and prosperity in the Pacific Northwest**

Johan Hellman, Executive Director of State Government Affairs



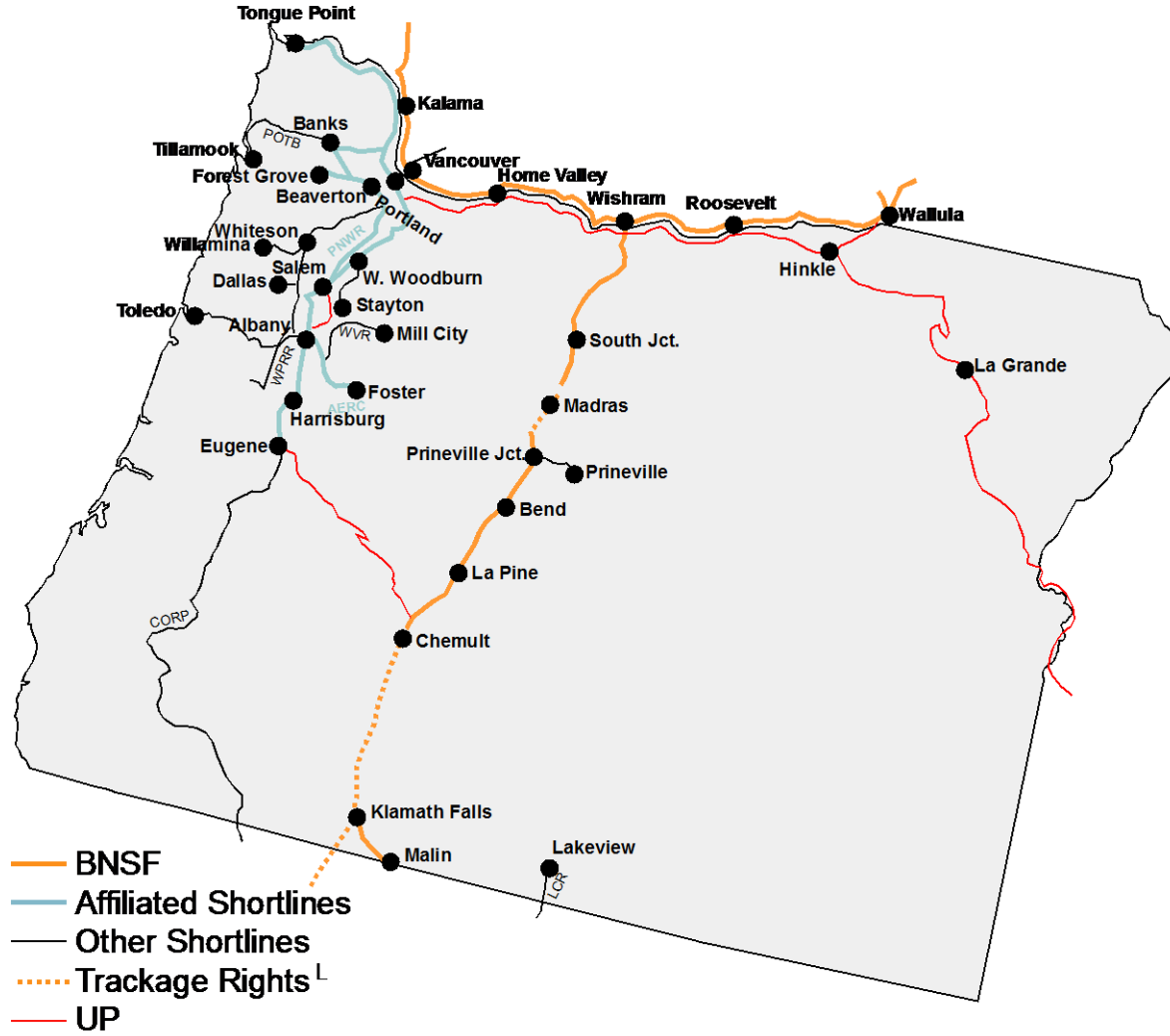
Over 100 Years in the Northwest



BNSF National Network

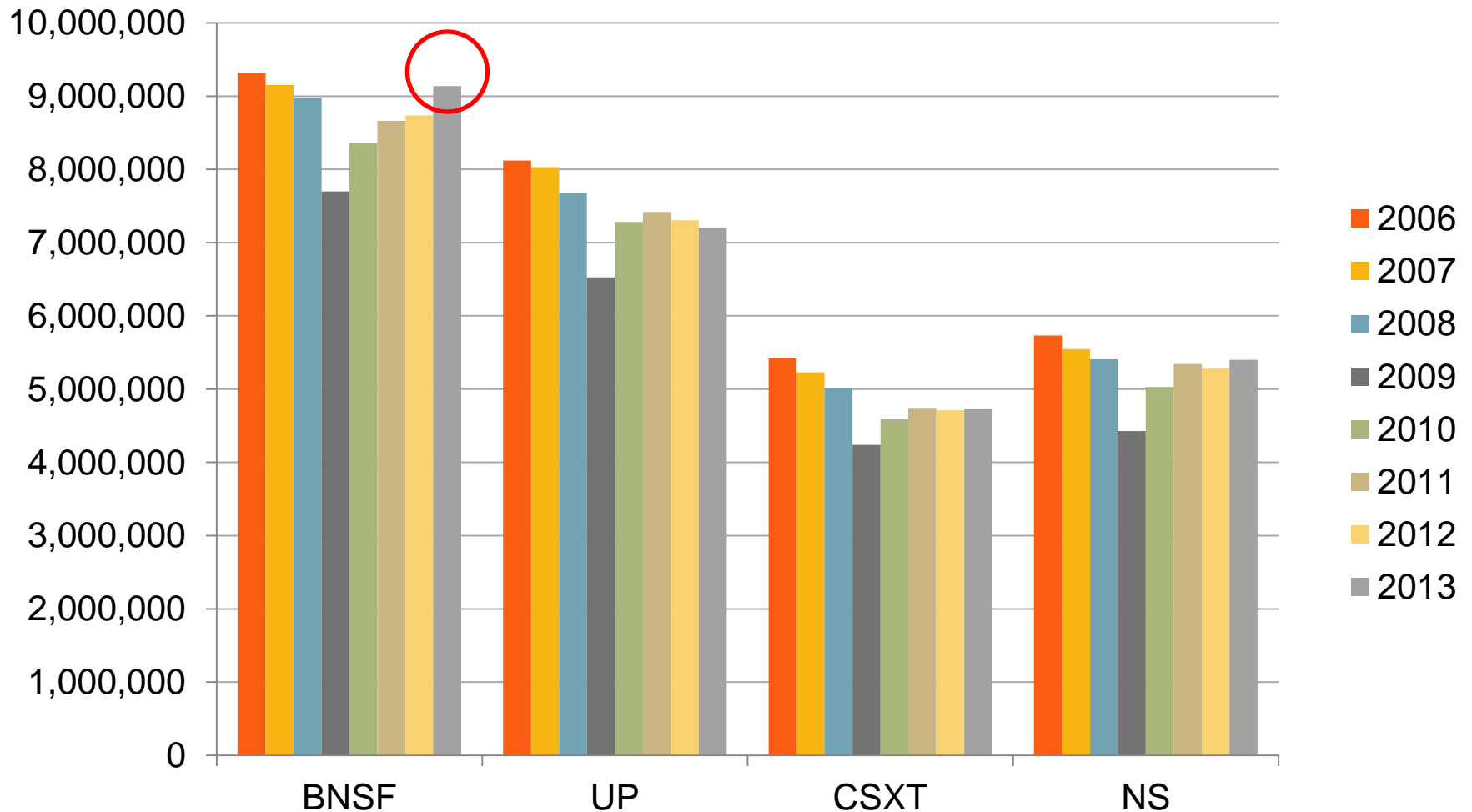


BNSF Oregon Network



As the Economy Improves, Rail Traffic is Rebounding

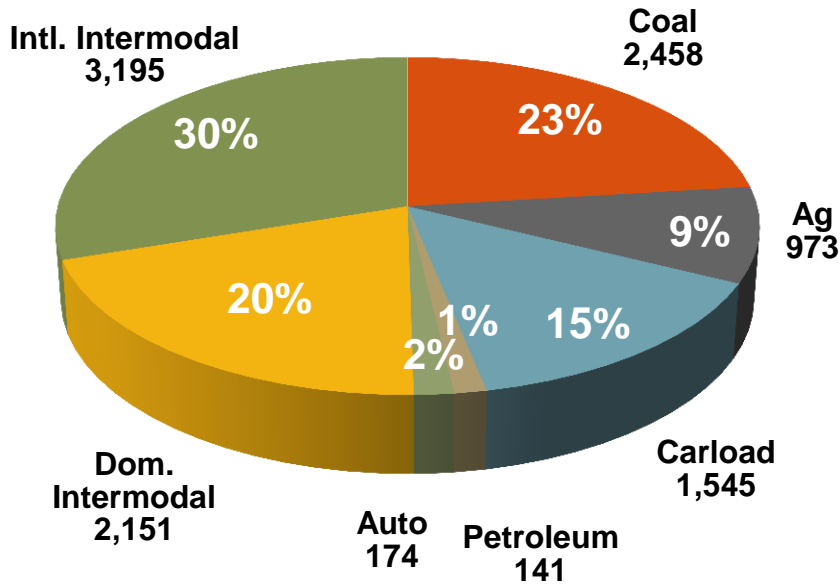
Units originated



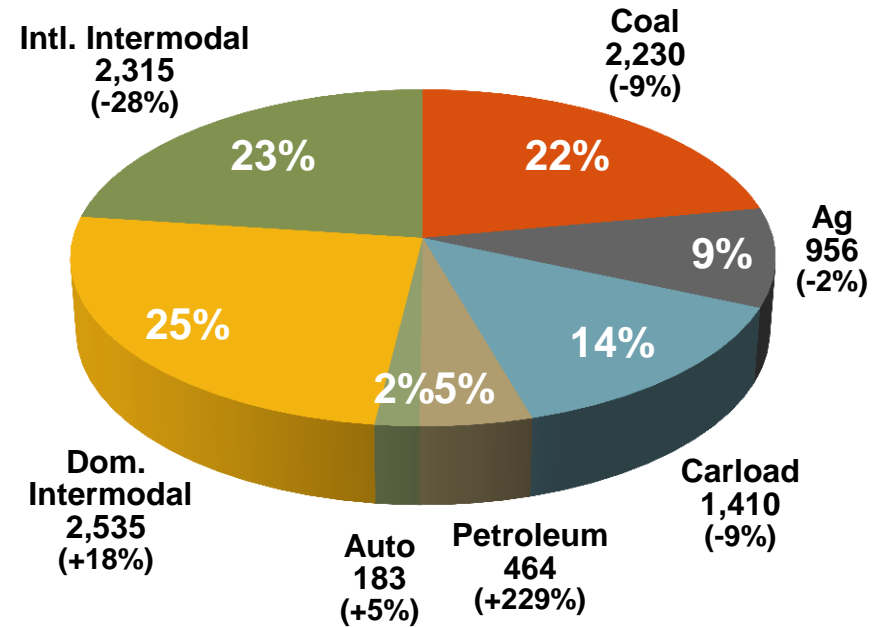
Traffic Growth is Much Different Today

Units in thousands

2006
Total 10,637

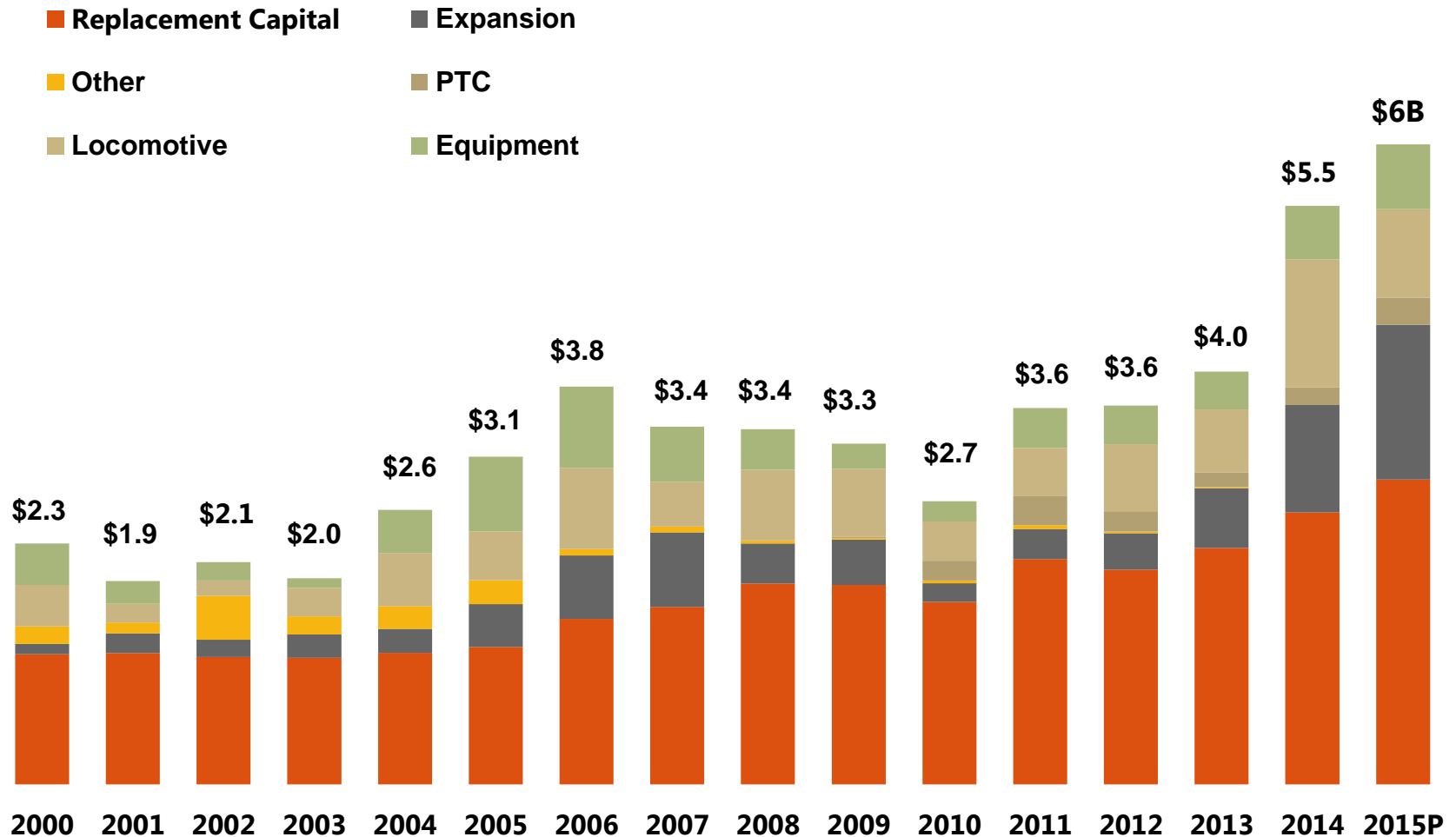


2013
Total 10,093
(-5%)



Capital Commitments

\$ Billions



2014 Capital Program - \$5.5B



\$3,643M

CAPACITY

Maintenance Capital:
\$2,615M

Expansion Capital:
\$1,028M



613

LOCOMOTIVES

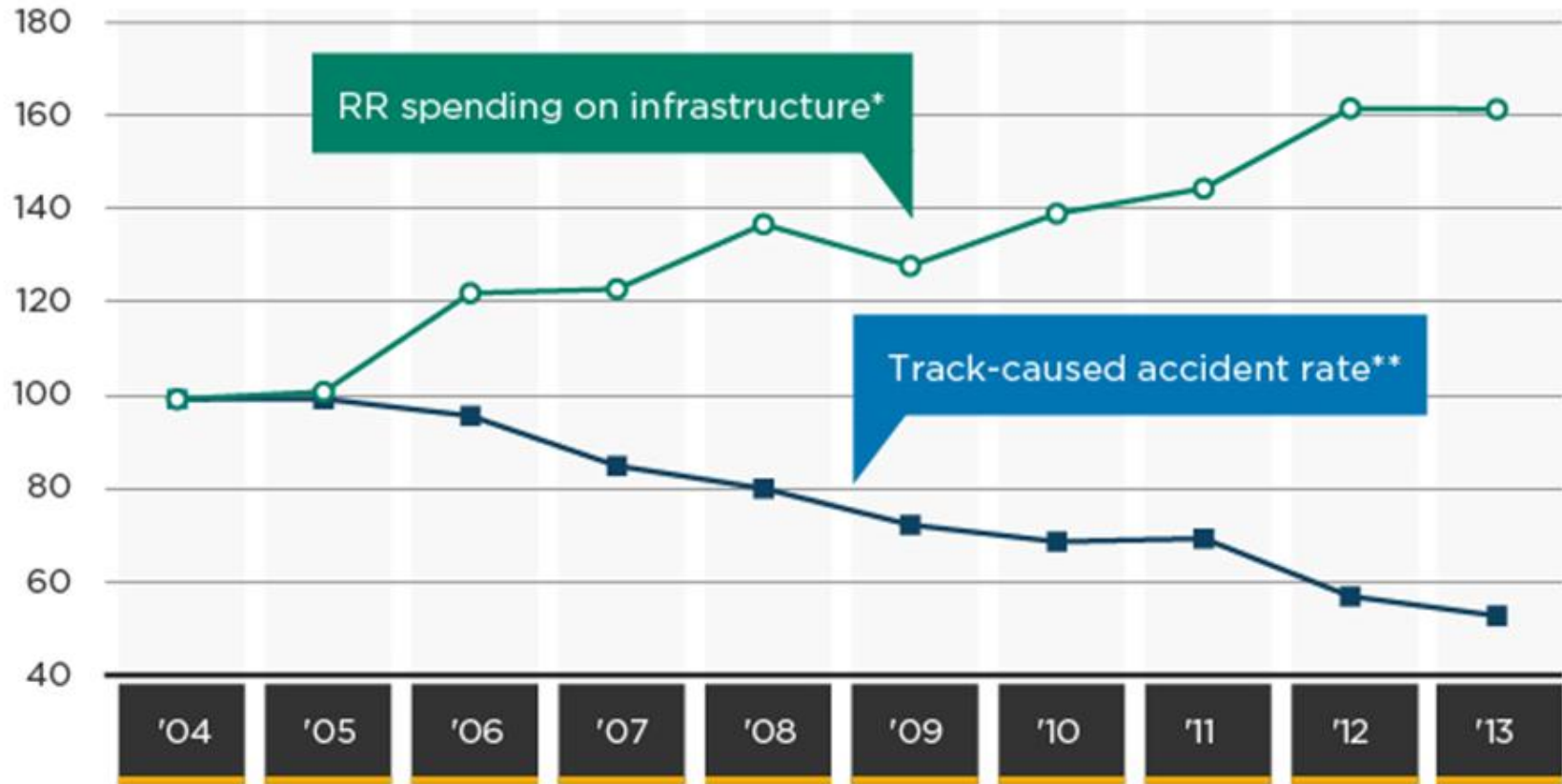
*includes long-term leases and acquisitions



+7,000

PEOPLE

Track Investments Reduce Incidents

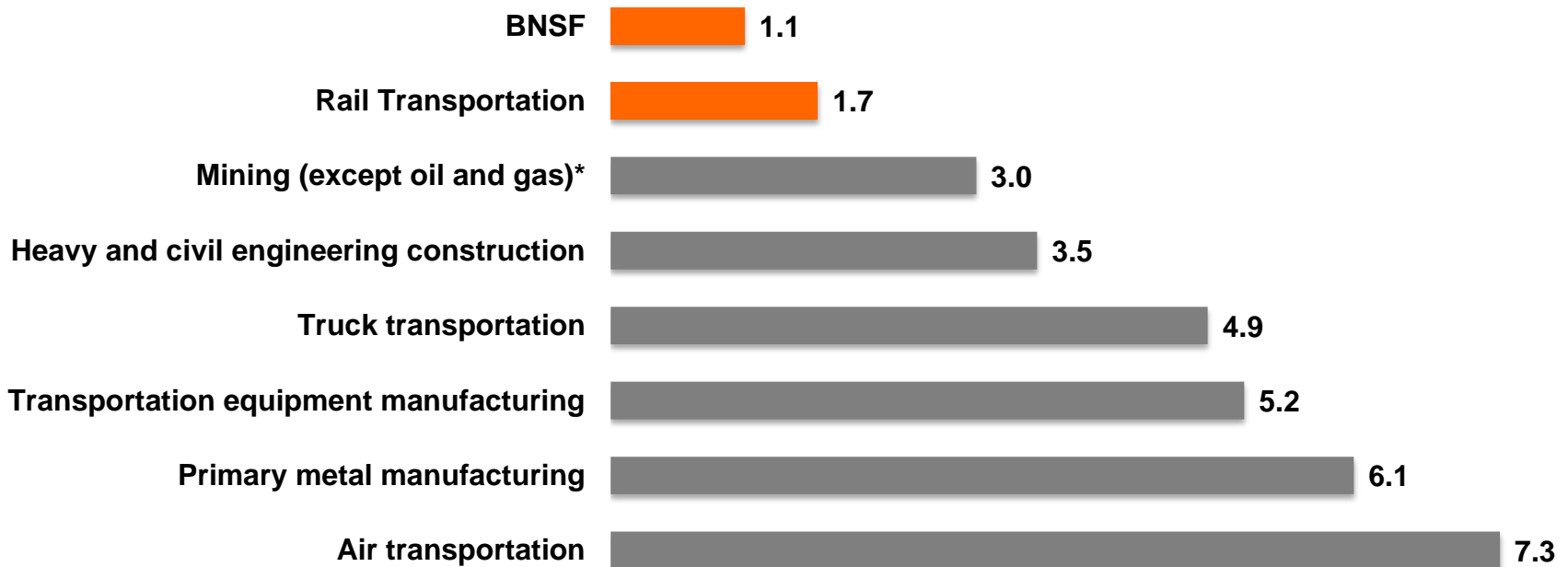


Source: Association of American Railroads

Preventing Accidents in First Place

BNSF's employee safety record exceeds the industry average for rail transportation, and is significantly safer than other major industries

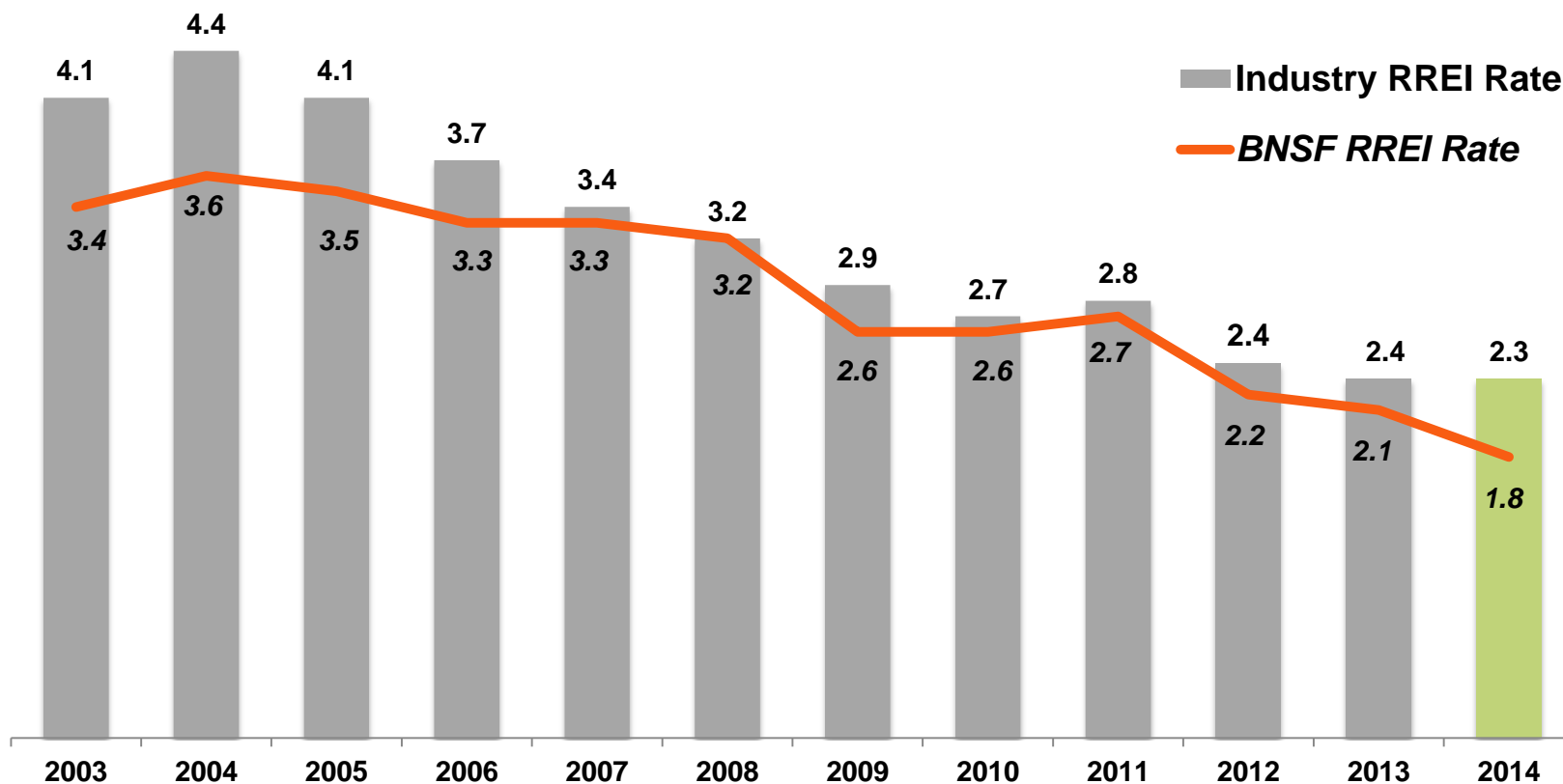
Injury Rate per 200,000 Employee Hours



2014: Safest Year in History

From 1980 to 2013 rates for accident, employee injury and crossing collisions fell by more than 80%

Industry Reportable Rail Equipment Incident Rate (Incidents per Million Train Miles)



Track Record for Safety

Comprehensive inspection process ensures safety by identifying potential problems before they can lead to unsafe conditions



Bridge and track inspections

- More frequent than required by FRA
- Most key routes inspected 4 times weekly
- Busiest main lines inspected daily
- State-of-the-art technology

Weather & earthquake inspections

- Weather warnings 24/7 from private weather service
- Special inspection program following natural events



Track Geometry Car



Geometry Car Inspections

- Track Surface
- Alignment
- Curve Geometry
- Gage
- Rail Wear



Railcar Defect Technology

Proactive detection improves safety and extends equipment service life



Wheel Impact Load Detector

Evaluates wheel surface defects

Warm Bearing Detection System

Monitors excess heat from wheel bearings

Wheel Detector, Drive Train Inspection

Measures wheel tread temperature

Acoustic Bearing Detector

Microphonically identifies and evaluates flaws

Network Operations Center



BNSF's Next Generation Tank Cars

EVOLUTION OF RAIL INDUSTRY TANK CAR STANDARDS FOR CRUDE OIL

The railroad industry is proposing to increase the federal tank car design and construction standards for new tank cars used to transport crude oil. This proposal comes after a previous upgrade proposal which the industry voluntarily adopted and has been observing since October 2011. This graphic shows the additional tank car components included in the latest rail industry proposal.

HIGH CAPACITY PRESSURE RELIEF VALVE

Current Standard:
No requirement

Latest Rail Industry Proposal:

Requires a high capacity pressure relief device to protect against a rise in internal pressure resulting from fire. Provides for faster release of product.

TOP FITTINGS PROTECTION

Current Standard:

Requires top fittings protection to protect the integrity of valves and fittings used to load product in the event of an accident.

Latest Rail Industry Proposal:

Contains the same requirement.

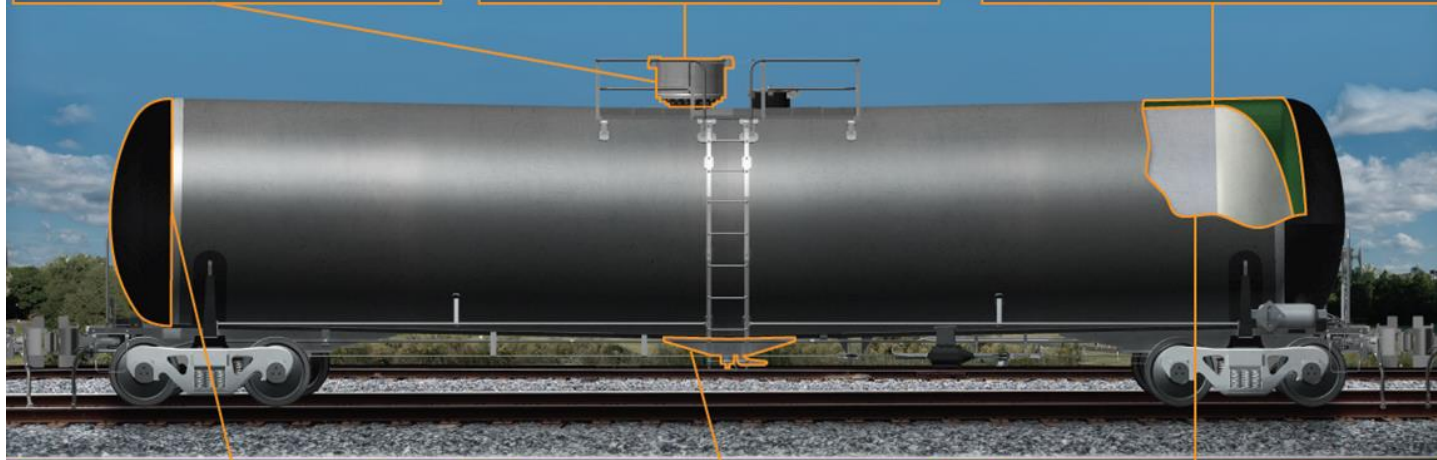
STEEL TANK

Current Standard:

Requires a minimum 1/8 inch thick steel tank for unjacketed cars and a minimum 3/8 inch thick steel tank for jacketed cars.

Latest Rail Industry Proposal:

Requires a minimum 1/4 inch thick steel tank.



HEAD SHIELDS

Current Standard:
Requires minimum 1/2 inch thick half height head shields at both ends of the tank car to improve puncture resistance.

Latest Rail Industry Proposal:

Requires 1/2 inch thick full-height head shields at both ends of the tank car.

BOTTOM OUTLET HANDLES

Current Standard:
No requirement

Latest Rail Industry Proposal:

Requires bottom outlet handle reconfiguration to prevent the handle from inadvertently opening the bottom outlets in the event of an accident.

JACKET AND THERMAL PROTECTION

Current Standard:
Requires a minimum 1/2 inch thick steel tank OR a 1/8 inch thick steel jacket.

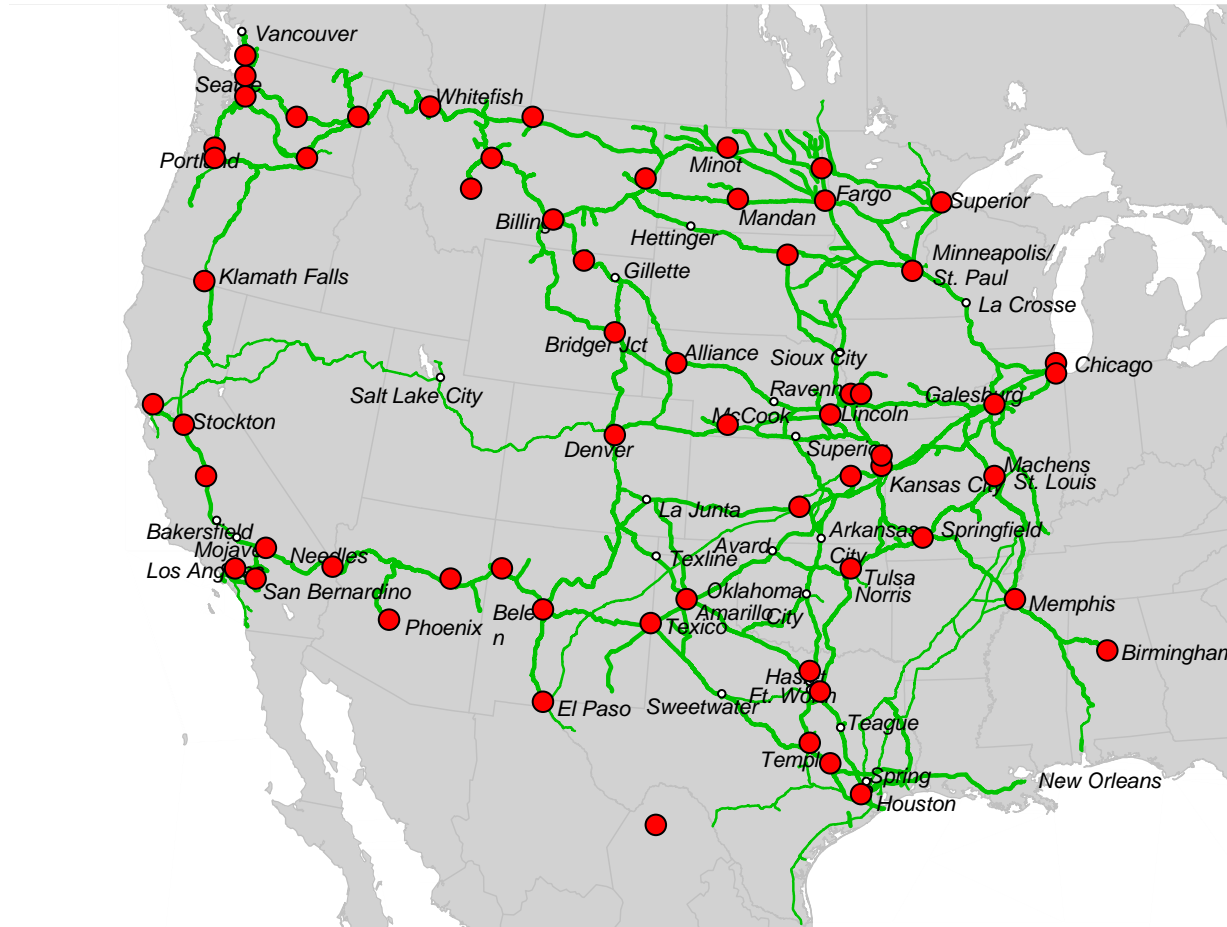
Latest Rail Industry Proposal:

Requires the addition of both a 1/8 inch thick steel jacket around the tank car and thermal protection.

Source: Association of American Railroads, February 2014

BNSF Hazmat Responder Locations

212 responders at 60 locations



Free Community Hazmat Training

BNSF trains 3,500 local first responders each year in communities across our network – more than 65,000 since 1996

Training includes:

- Instructor led
- Hands-on equipment in field
- Train list / shipping papers
- Placards
- Equipment
- Incident assessment



Specialized Hazmat Equipment

- Industrial fire-fighting foam trailers
- Emergency breathing air trailers
- Chlorine kits
- Midland kits
- Air monitoring assets
- Current Busters



Industry safety actions with U.S. DOT

The rail industry is implementing new voluntary operating practices to further ensure the safety of shipping crude oil by rail

- Increased track inspections
- Upgraded braking systems
- Rail traffic routing technology
- Lower speeds
- Trackside safety technology
- Emergency response training
- Tuition assistance for first responders
- Emergency response capability planning

Remediation

BNSF will restore the site to pre-derailment conditions



Cameron, Texas, post derailment

- Responsible for mitigation of the spill and restoration
- Contracts with pre-approved consultants and contractors
- State agencies oversee the work and must concur before a site is closed

BNSF[®]

RAILWAY

