



# ND PSC Rail Service & Safety Discussion

**Amy McBeth**

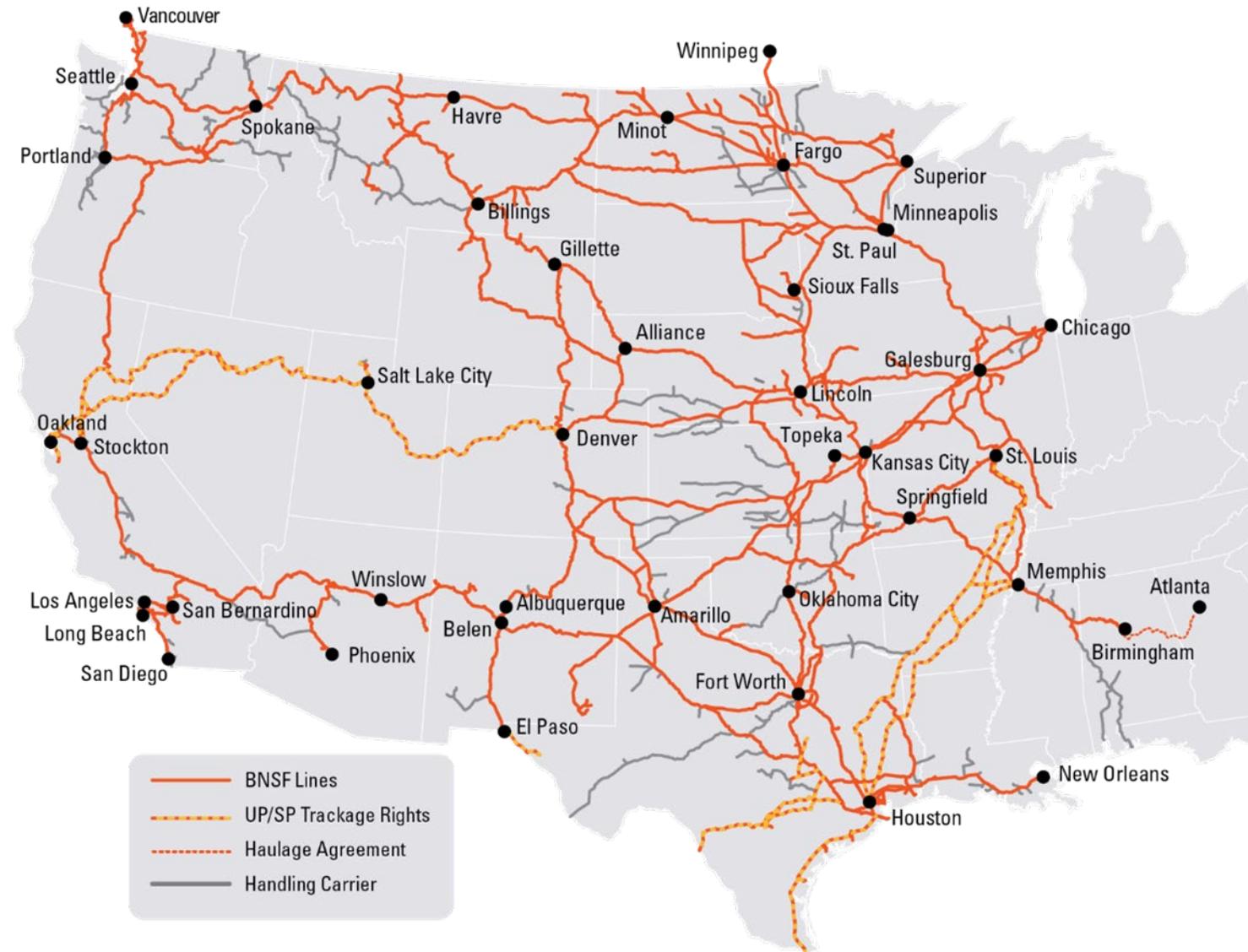
BNSF RAILWAY PUBLIC AFFAIRS

MAY 27, 2021



# Our Network

- **32,500 route miles** in 28 states and three Canadian provinces
- **13,000** bridges and **89** tunnels
- Serves **+40 ports**
- **25** intermodal facilities



# BNSF in North Dakota



**@1,200**  
Employees

**1,600+**  
Route Miles



**~352,000**  
Carloads shipped from state



**\$1.5 Billion**  
Invested Since 2013



# The BNSF Vision



**Our vision is to realize the tremendous potential of BNSF Railway by providing transportation services that consistently meet our customers' expectations.**



# BNSF – A Culture Focused on Safety



SAFETY VISION: To operate free of accidents and injuries



EMPLOYEE



OPERATIONAL



COMMUNITY

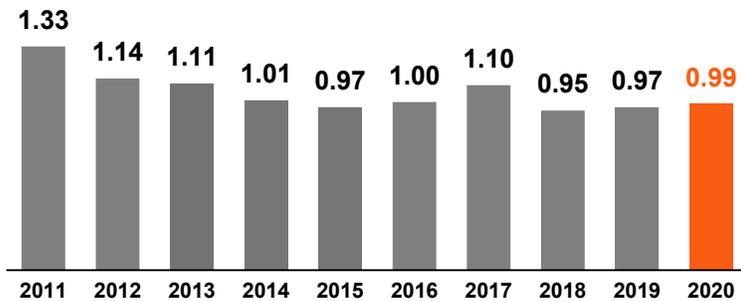


# BNSF – Safety Results



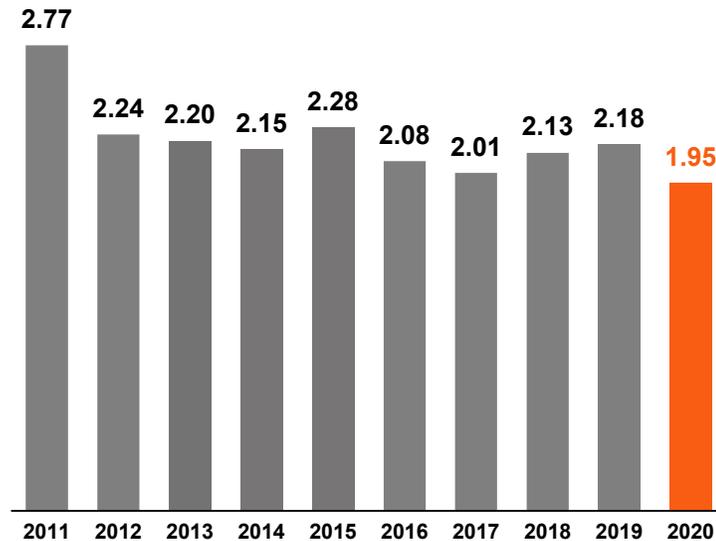
## Employee Frequency

Reportable Personal Injury Incidents  
Per 200,000 Employee Hours



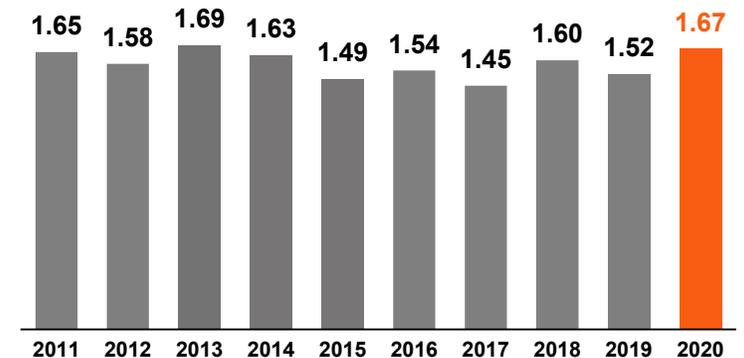
## Rail Equipment

Reportable Derailment Incidents  
Per Million Train Miles



## Public

Crossing Accidents  
Per Million Train Miles

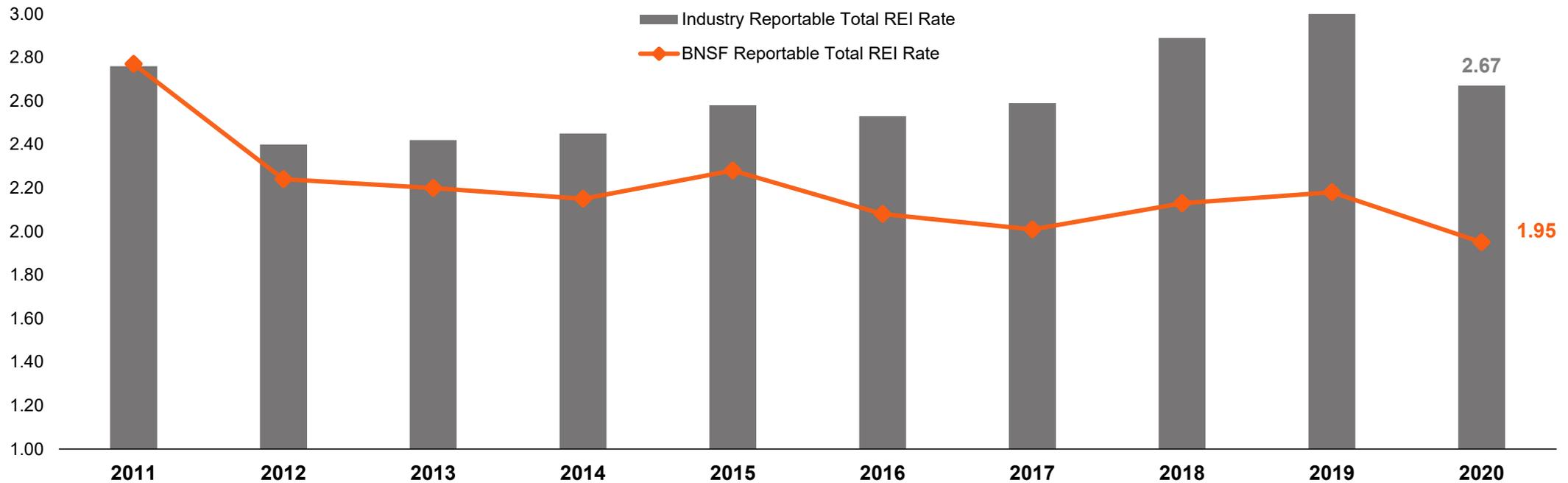


# Safety Leader for Risk Reduction



*From 2011, the industry rail equipment incident rate has decreased by 3%, while BNSF's rail equipment incident rate has been reduced by nearly 30%.*

Rate of train incidents per million train miles



# Technology Enhances Safety and Efficiency



**More than 4 million** revenue service trips using Positive Train Control (PTC)



Wayside Detectors take **+35 million** readings daily

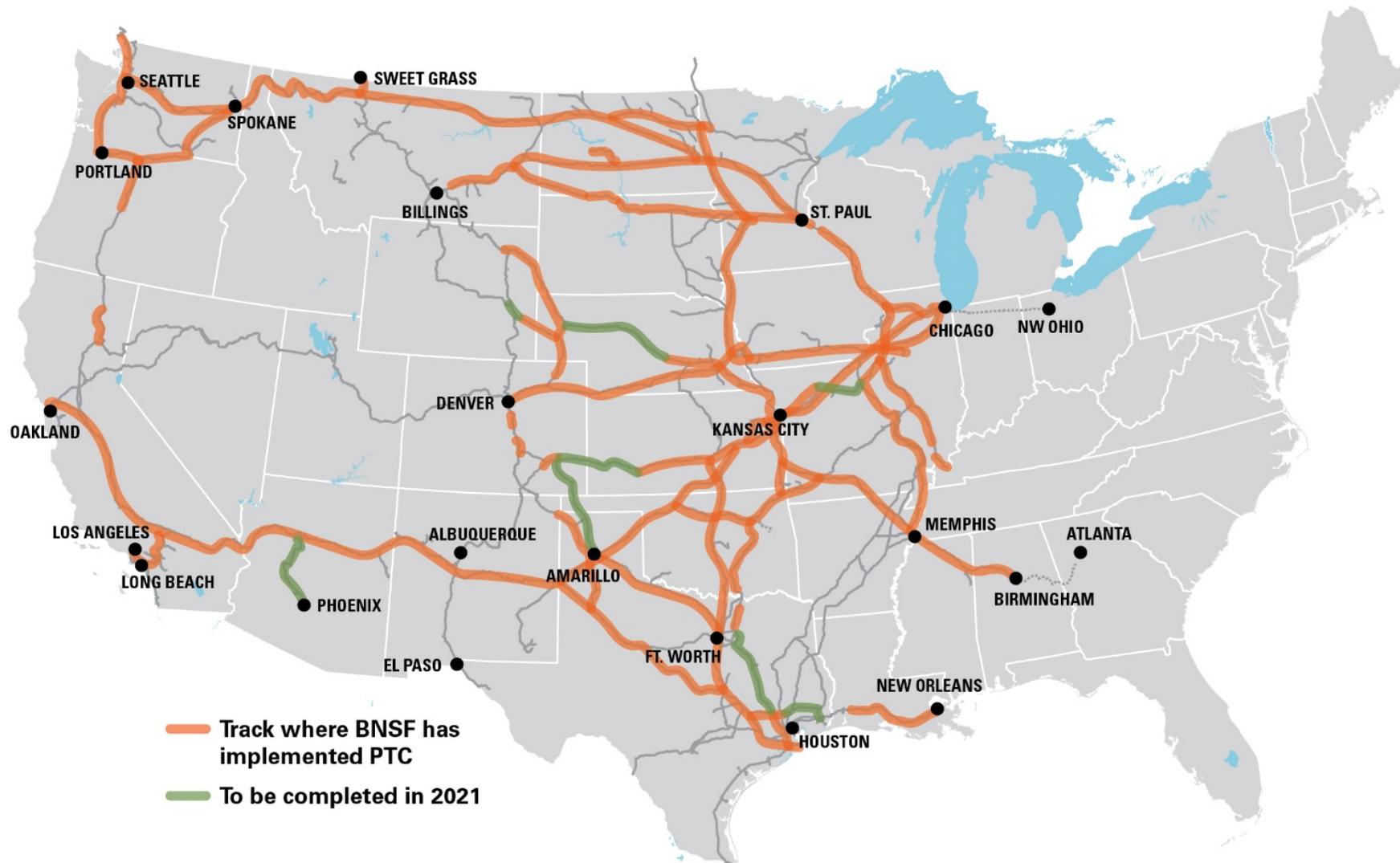


**Autonomous Track Geometry Cars** increase the number of miles inspected



Utilizing **Big Data Analytics** for a comprehensive view

# Positive Train Control (PTC) – BNSF's Network

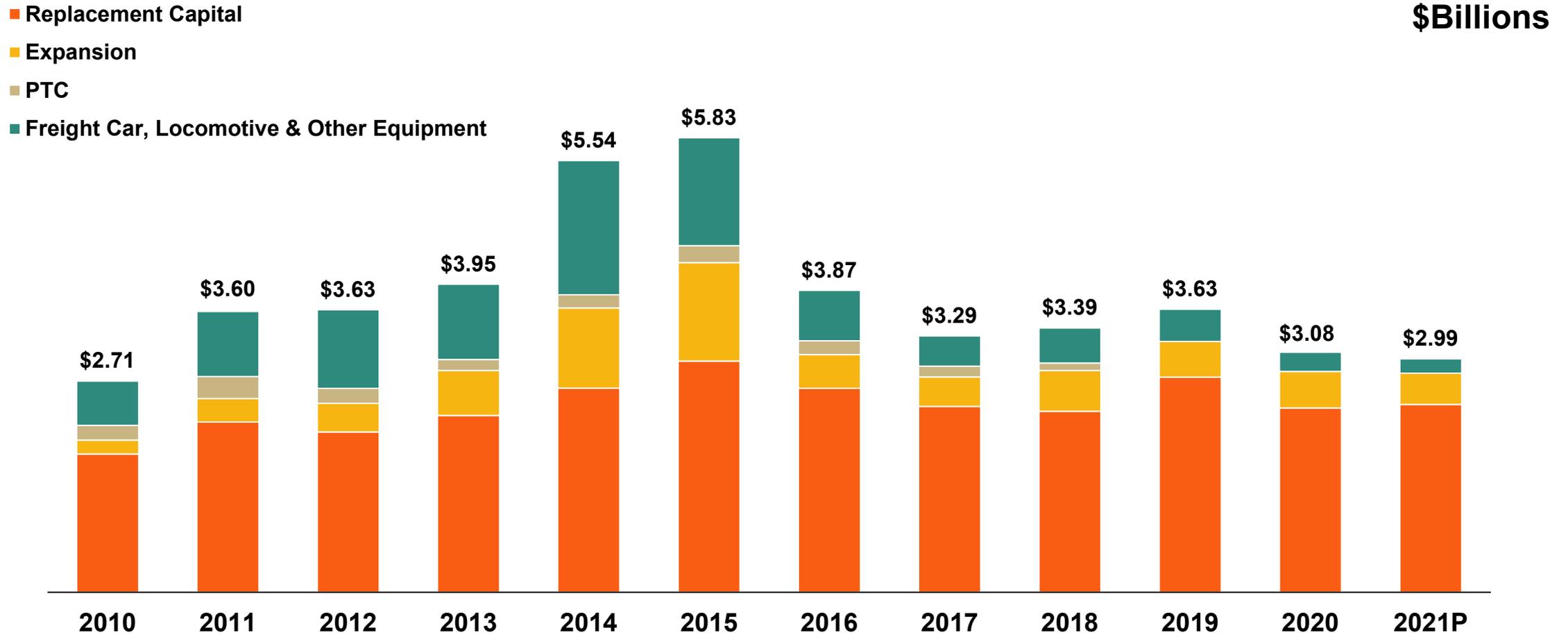


# Prevention: Equipment Detection Technology

- More than 4,000 trackside detectors
- Hot Box Detector (HBD)
- Wheel Load Impact Detector (WILD)
- Trackside Acoustical Detector (TADS)
- Sonic Cracked Wheel/Axle Detector (CWAD)
- Machine Vision Systems
- Magnetic Particle Inspection
- Warm Bearing Detection System (WBDS)
- Hot Wheel Detectors (HWD)
- Truck Performance Detectors (TPD)



# BNSF's Capital Investments

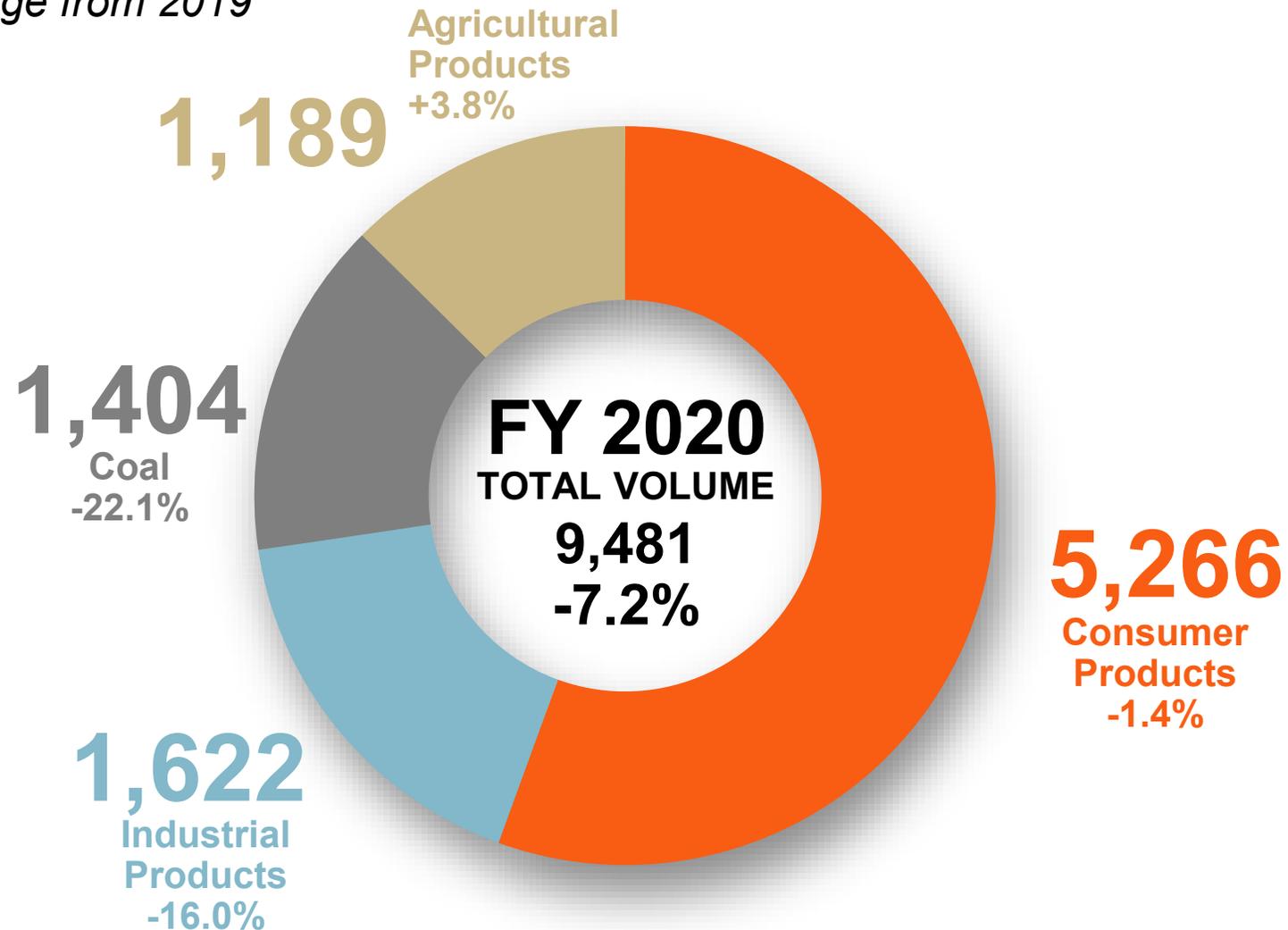


# BNSF Volume – Full Year 2020



Total units and % change from 2019

In Thousands

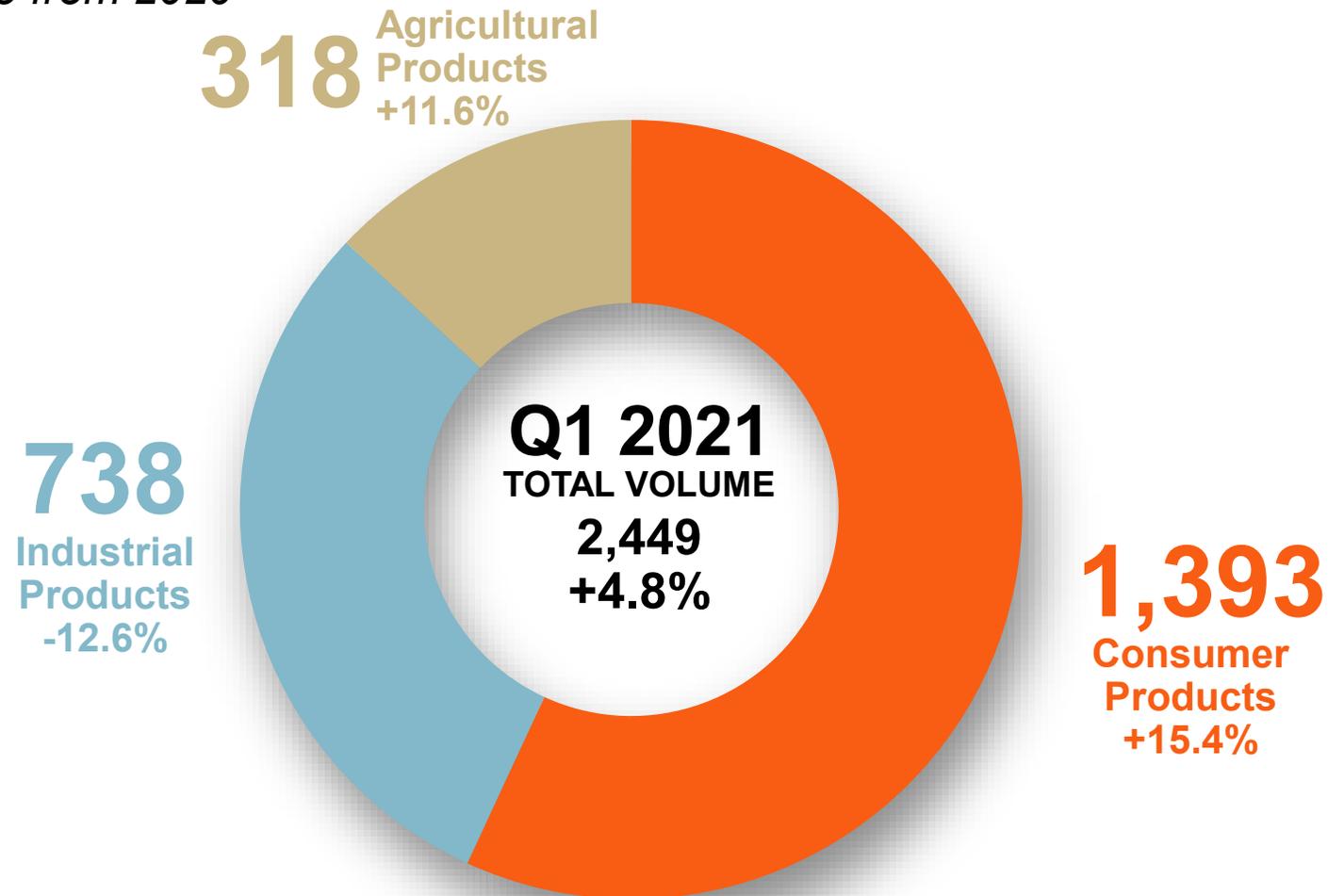


# BNSF Volume – 1<sup>st</sup> Quarter 2021



Total units and % change from 2020

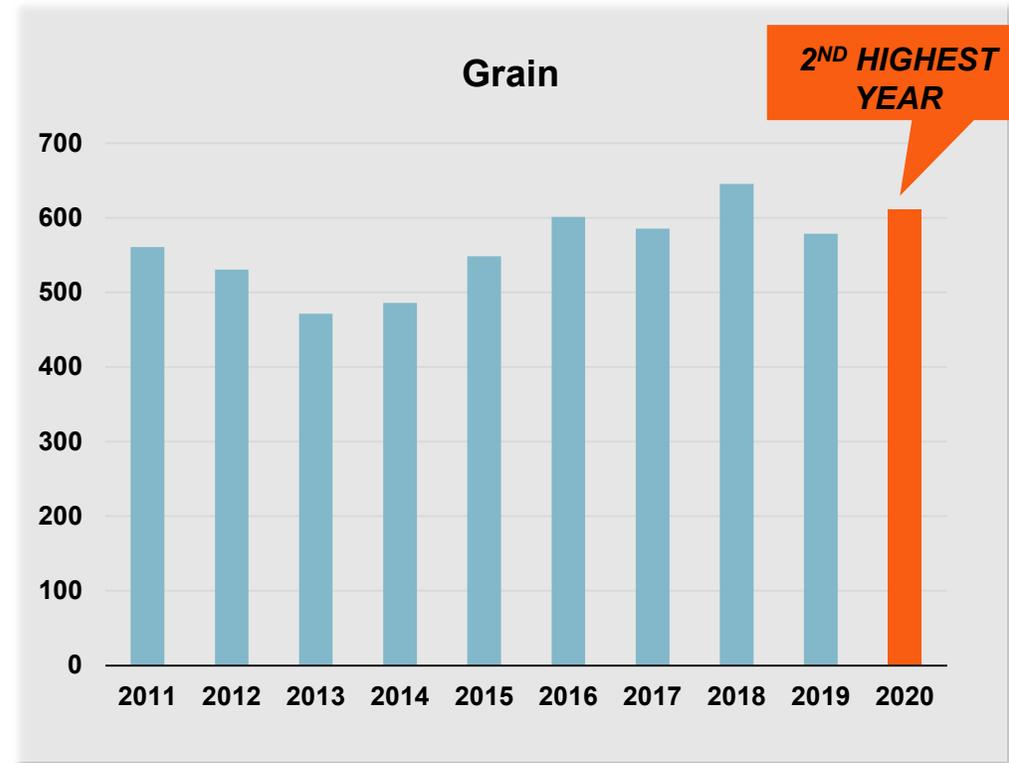
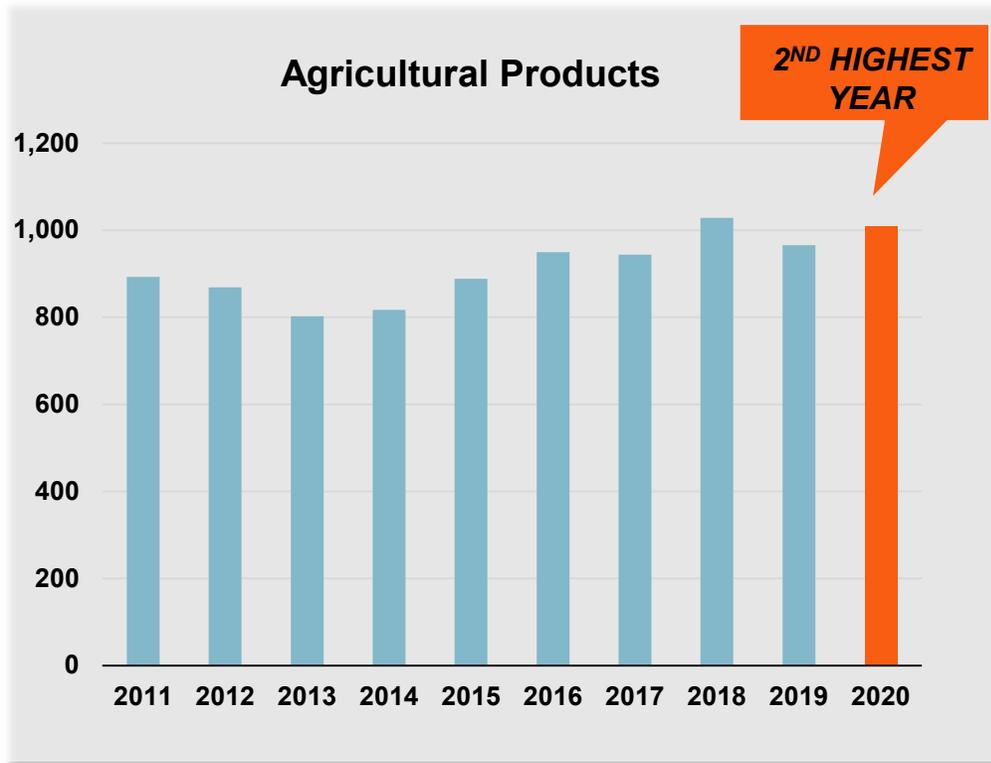
In Thousands



# BNSF Agricultural Volumes



(Thousands of units)



# BNSF Bismarck Bridge

Condition-based replacement, components  
**130 yrs old**. Current speed & weight restrictions.

ND grain for exports to PNW, aggregates, energy  
products all traverse bridge

New structure to provide significant improvement  
in **operational reliability, safety**

**3.5 years** in permitting process,  
U.S. Coast Guard preparing draft **EIS**, public  
comment **June 14-July 28**, public meeting TBD  
later June

**@\$60 mil BNSF project**. Alternatives leaving  
existing bridge increase costs \$60-\$90 mil, impact  
property, delay construction

Text [Railroad Bridge to 52886](mailto:Railroad Bridge to 52886) for updates



**BNSF**  
RAILWAY



DED