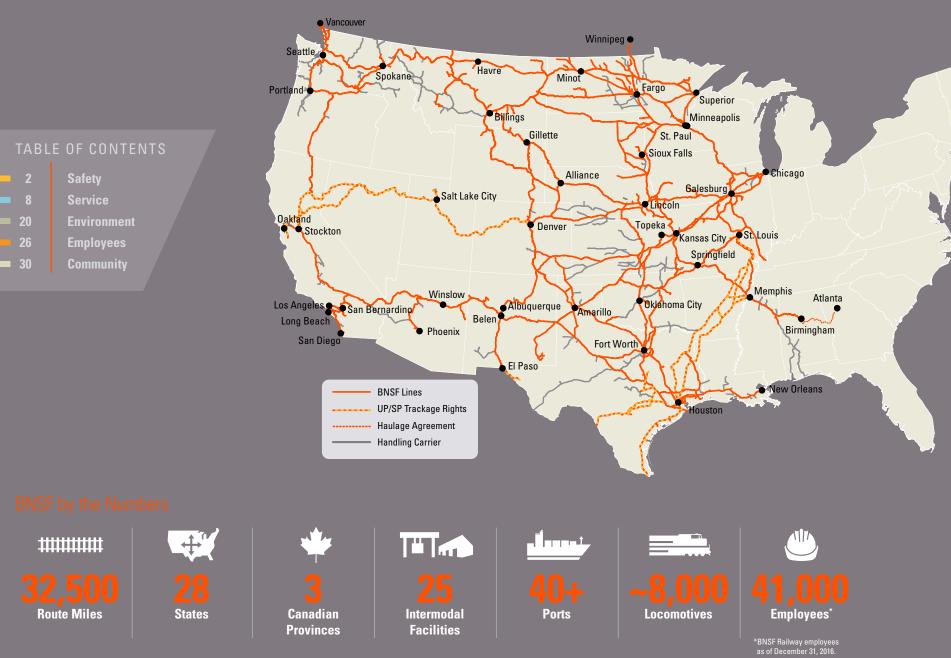






#### THE BNSF NETWORK



#### A MESSAGE FROM CARL ICE

s we look back on 2016 and our results for the year, it is clear that we are experiencing some fundamental structural changes occurring in the markets we serve. As we move forward we must remain strong, resilient and agile while driving continued improvements in safety, service, efficiency and reliability for our customers.

Safety will always be the most important thing we do, and we will not be successful until we achieve our safety vision. Nothing is more important at BNSF than our people returning home safely every day.

When we look at last year's safety performance, we saw mixed results. After steady declines in injury frequency and severity in early 2016, we saw an increase in injuries during the second half of the year. However, we also saw a reduction in variability across work groups and locations, reinforcing that we do have the right processes in place to achieve our safety vision.

Change is constant and the pace of change is accelerating. This has not only had a direct impact on our overall volumes, but our business mix as well. Our volumes in 2016 were down by half a million units – or 5 percent overall – reflecting a structural change in our coal business as well as significant declines in crude oil and to a lesser degree international intermodal.

Despite the challenges those business sectors experienced, we moved record volumes of Agricultural Products, increased frac sand shipments in Industrial Products and our Consumer Products business continued to serve as our overall volume leader representing more than half of our 2016 volumes, reflecting our ability to capture increased automotive and domestic intermodal business. Actions like identifying new ways to leverage our existing network to gain market share, developing new markets or offering new services that we couldn't have previously offered will be important to our future.

Thanks to the dedication of our employees, we are always focused on sustaining and building on the strong service that is at the core of our Vision. Offering best-in-class service is a key differentiator for BNSF, helping us sustain and attract new business, increase market share and enhance asset utilization.

Our service to customers was solid through most of 2016 thanks to the hard work of employees and our significant capital investments over the past several years. We did experience some challenges along our Northern Corridor and faced severe winter weather that impacted service in the final months of the year.

As we move through 2017, I remain as confident in our future as I've ever been because we continue to be relevant to our customers and the communities that we serve. We are proud to be railroaders because what we do is important – safely moving the goods that are vital to our nation and our economy every day.



**Carl Ice** *President and Chief Executive Officer* 



At BNSF, our safety vision is to operate completely free of accidents and injuries. We strive to achieve this vision by training our people, implementing safety programs, investing in our railroad and utilizing technology.

#### **Training BNSF People**

BNSF employees receive training on a wide range of safety rules and practices, including federal regulations and rail industry recommendations, as well as BNSF-specific initiatives. The majority of formal training occurs at the BNSF Technical Training Center (TTC) in Overland Park, Kansas. The TTC develops course curricula and gives trainees access to simulation and lab tools that represent locomotives, cranes, grade-crossings and other major equipment types. Every year, instructors train approximately 9,000 BNSF team members, plus another 500 rail industry employees.

#### **Approaching Others About Safety**

In 2016, our Approaching Others About Safety initiative continued strongly, generating thousands of conversations every day among BNSF team members and helping them find ways to minimize risk and eliminate injuries for themselves and their work teams. The initiative is designed to address the exposures that result in 97 percent of the fatalities and serious injuries in our industry. In 2016, 29,500 team members received Approaching Others About Safety training, resulting in them learning to be confident and effective when speaking to one another about safety.

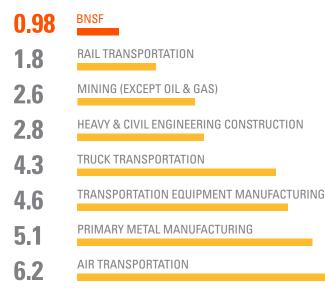


**29.5K** team members received Approaching Others About Safety training in 2016

#### **Getting Safer**

Rail, as an industry in the U.S., is safe and getting safer. And BNSF is a leader in this crucial area. We recognize we must maintain our safety focus to reduce and eliminate risk. We are confident we have the right processes in place to achieve our vision of an injury-free workplace.

#### 2016 Injury Rate Per 200,000 Employee Hours



Injury rates for BNSF and the rail industry are quoted based on Federal Railroad Administration 2016 year-end data. All other data is from the year 2015 from the Bureau of Labor Statistics.

# **Training First Responders**

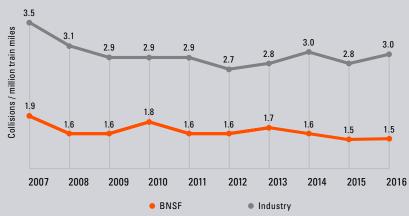
In the unlikely event of an emergency involving our railroad, trained first responders are essential. BNSF has long played an active role training emergency hazmat responders in our local communities. In 2016, we helped train more than 11,000 first responders across our network. BNSF and railroad industry partners provide this training through the Transportation Community Awareness and Emergency Response (TRANSCAER) program. Across our 32,500-mile network, BNSF has an extensive system of internal emergency responders who are trained to respond to situations from small non-accident releases to major releases. We also have strategically placed response equipment across our network.



# **Strengthening Grade-Crossing Safety**

BNSF invests an average of \$117 million a year on grade-crossing maintenance, improvement and safety programs. This commitment has enabled us to achieve one of the industry's lowest highway-railroad grade-crossing collision rates; since 1995, that rate has been reduced by 71 percent. Reducing the number of grade-crossings is a key strategy. Working with communities and landowners, we have been able to close more than 6,200 grade crossings since 2000. In 2016, BNSF participated in International Level Crossing Awareness Day activities in communities across our network.

Highway-Rail Grade-Crossing Collisions



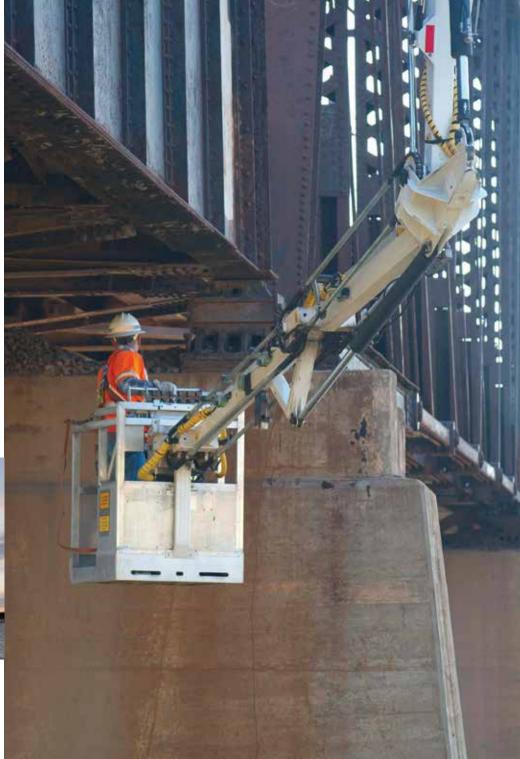
Source: Federal Railroad Administration 2016 year-end data.



#### **Inspecting Our Network and Equipment**

BNSF regularly and rigorously inspects our network and equipment to ensure we continue to run a safe, reliable railroad. Our efforts include routine visual inspections by more than 650 trained and experienced track inspectors who patrol miles of track. BNSF also uses special rail cars equipped with ultrasonic detection and other technologies to look for flaws in the rail and to test track geometry. Key routes are inspected twice as frequently as required by the Federal Railroad Administration. Our busiest mainline routes are often inspected even more frequently, and our bridge inspectors conducted more than 61,000 bridge inspections in 2016.





# **Enhancing Safety by Using Technology**

More than 2,000 wayside detectors across our network generate data that we use to improve efficiency and enhance safety. These detectors collect data 24/7 year-round, alerting us to potential safety issues such as high-impact wheels, overheated bearings and damaged or worn components. The wayside detectors monitor roughly 1,300 trains per day. An analysis is performed on more than 30 million readings per day, enabling us to monitor equipment health, generate alerts and determine the severity of the issues that have been identified. By applying advanced analytics, BNSF is developing a system to proactively leverage this data to predict issues before they occur. Predictive maintenance allows sufficient time for intervention and prevents incidents from occurring.

Another technology BNSF deploys to enhance safety are unmanned aerial vehicles (UAVs). Through the Federal Aviation Administration's Pathfinder Program, we are using UAVs to inspect rail infrastructure beyond visual line-of-sight in isolated areas. We also use smaller UAVs to supplement our visual inspections of track and bridges. UAVs allow our inspectors to gather valuable information about the condition of equipment and the surrounding environment, keeping our team members and our network safe.

From radar that penetrates the ground to UAVs hovering in the sky, BNSF goes to great lengths to deploy the technologies that strengthen the safety of our network.





BNSF continues to enhance our service – adding service lanes, improving facilities, streamlining processes and more – to help us perform our vital role in strengthening the supply chain and supporting the economy.

#### What We Carried in 2016

(Thousands of units, with year-over-year change)

#### **Consumer Products** Y/Y Change +1%

#### Industrial Products Y/Y Change -8%



**Coal** Y/Y Change -21% Agricultural Products Y/Y Change +6%

#### 2016 Capital Investments

5% **Positive Train Control** 10% **Expansion and Efficiency** 18% Locomotives, Freight Cars and Other Equipment **67%** Core Network and **Related Assets \$3.9B** 



#### **Developing Rail-Served Sites**

In 2016, BNSF launched our new Site Certification Program to identify optimal rail-served industrial sites for our customers. To select sites, our Economic Development team conducts in-depth reviews to determine if sites meet our stringent readiness standards, which are intended to streamline development opportunities for our customers. Those who build new rail-served facilities on a BNSF Certified Site are expected to save six to nine months of construction time as a result of the site's advanced level of preparedness for development.

**BNSF** Certified Sites include:

- 1 AgriTech Park in Great Falls, Montana (225 miles north of Billings)
- 2 Ameripointe Logistics Park in Ardmore, Oklahoma (100 miles south of Oklahoma City)
- 3 Central New Mexico Rail Park in Los Lunas, New Mexico (30 miles south of Albuquerque)
- Commerce Center of Southeast Iowa in Middletown, Iowa (90 miles southwest of the Quad Cities)
- 6 Gallup Energy Logistics Park in Gallup, New Mexico (140 miles west of Albuquerque)
- 6 John W. Kelsey Business and Technology Park in Greenville, Illinois (45 miles northeast of St. Louis)

- 7 Kansas Logistics Park in Newton, Kansas (30 miles north of Wichita)
- 8 Paramount Logistics Park in Shafter, California (150 miles north of Los Angeles/Long Beach)
- 9 Port of Northern Montana Multimodal Hub Center in Shelby, Montana (30 miles south of the Canadian border, 80 miles east of Glacier National Park)
- 10 Rail Park at Central Pointe in Temple, Texas (120 miles south of Fort Worth)



#### Not Your Run-of-the-Mill Project

Big River Steel completed its \$1.3 billion Flex Mill<sup>™</sup> in Osceola, Arkansas. The BNSF-served steel mill is the first of its kind in the world, with the flexibility to produce a spectrum of steel products, and represents the largest economic development project in the state's history.

#### **A Sweet Location**

American Crystal Sugar opened a new \$40 million bulk sugar storage facility in 2016 on the BNSF rail network in Montgomery, Illinois. The largest freestanding sugar storage facility not attached to a sugar-producing factory, its strategic location will allow American Crystal Sugar to store its product closer to its large Midwestern customer base. BNSF manifest trains began delivering sugar for storage in November 2016.



#### **Serving the Military**

BNSF answered the call of the U.S. military in 2016 by executing a large-scale delivery of equipment for the soldiers of the First Armored Brigade Combat Team, 34th Military Division. The operation involved loading hundreds of Humvees, Bradley Fighting Vehicles, Abrams tanks and other systems on eight BNSF trains at Camp Ripley in Minnesota and delivering them to the Mojave Desert nearly 2,000 miles away for a major training exercise. Creatively utilizing the limited track capacity at Camp Ripley, BNSF managed to run eight trains in nine days with the needed equipment.



#### **Additional Customer Investments**

Big River Steel and American Crystal Sugar were not the only BNSF customers who made significant investments in 2016. Reflecting their confidence in our effective and efficient transportation solutions, BNSF customers collectively invested nearly \$3.5 billion for new or expanded facilities in 2016. These investments – the sixth straight year our customers have invested more than \$1 billion – are expected to generate 3,000 jobs in local communities.

#### **Opening a New Yard**

To more efficiently serve shippers, BNSF opened Cadet Yard in 2016. Ten miles southwest of San Antonio, the new switching and classification yard will lower transit times for freight from all lanes out of Mexico and south Texas. It will also relieve switching congestion at our yard farther north in Temple, Texas. For automotive customers, the new space and switching functionality at Cadet Yard will allow BNSF to originate solid vehicle trains for the first time out of south Texas, as opposed to at our Alliance facility in Fort Worth.



#### **Responding to Market Shifts**

Many BNSF customers operate globally, including agricultural customers who ship corn, wheat, soybeans and more. When drought conditions in Brazil and Argentina provided an immediate opportunity for increased corn exports for American farmers, BNSF helped them meet the demand. We rapidly offered more shuttle freight to the market, particularly to the Pacific Northwest for exports to Asia, from a low of 75 shuttle trains in the spring to a high of 142 shuttle trains late in the year.

#### **Launching New Intermodal Services**

BNSF introduced two major new intermodal services in 2016. The first gives shippers faster intermodal service between the Pacific Northwest (PNW) and Texas. The new service allows shippers who

move commodities and consumer goods between Portland, Oregon or Seattle, Washington, and Dallas/Fort Worth, Texas, to reduce their transit times by up to a day. Traffic operates Monday through Friday in both directions.

The second new service is a joint intermodal offering with Kansas City Southern (KCS) delivering shipping solutions between the U.S. and Mexico. Northbound, the service operates from Toluca, San Luis Potosí or Monterrey in Mexico to Dallas/Fort Worth or Chicago in the U.S. Southbound, it originates in Chicago or DFW to Laredo, Texas, or to Monterrey, San Luis Potosí or Toluca in Mexico. Customers can also connect via the BNSF network to West Coast and PNW markets and via carrier partners to other markets including in the Northeast and Canada. The service provides competitive truck-like transit times and features a multi-layered safety and security process.



#### **Driving Automotive Excellence**

BNSF is committed to delivering the highest level of service to all our customers, including automotive. A new car or truck is loaded onto or unloaded from a BNSF automotive train approximately every 11 seconds. That amounts to more than 2.8 million vehicles, or about one out of every six cars and trucks sold in North America annually.

Our commitment to service excellence was recognized in 2016 when we received the President's Award for Logistics Excellence by Toyota Logistics Services for the third consecutive year. We were also honored to be presented with the Customer Experience Award by Mercedes-Benz and Commitment to Innovation and Partnership recognition by Fiat Chrysler Automobiles.



A new car or truck is loaded onto or unloaded from a BNSF automotive train approximately every

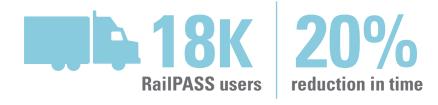
**11 seconds** 



#### Streamlining the Process for Trucking Partners

At BNSF, we strive to give our customers transportation solutions that deliver innovation, offer optionality and create capacity. An example is the 2016 launch of our RailPASS mobile application, specifically designed to make it easier for our trucking partners to move freight in and out of our intermodal facilities.

By the end of 2016, more than 18,000 of our trucking partners had downloaded the mobile application, with an average 200 new users every week. Many drivers have shared with us that they like the ability to input and view shipment details directly through the app, which saves 15 to 20 minutes before they arrive at an intermodal facility. In addition, RailPASS users have seen a 20-percent reduction in the overall time they spend inside one of our intermodal facilities. Drivers will experience even more benefits as we plan to roll out expanded RailPASS app functions in 2017.



## **Providing Award-Winning Service**

Recognition for the level of service we provided in 2016 included receiving the 2016 Premier Service Transportation Award from Trinity Industries. Trinity's rail group is the largest railcar manufacturer in North America, and the award recognizes companies that have provided Trinity with exceptional service quality, consistency and innovation over the past year.

In addition to facilitating the movement of empty rail cars from Trinity manufacturing plants to their respective destinations, BNSF offered expanded services to help Trinity meet the needs of its customers, including additional service days, on-site training on e-business tools and best practices for managing empty rail equipment. BNSF also helped Trinity make fluidity improvements to its Mexico operations.





With the most environmentally friendly mode of land freight transport, BNSF helps reduce carbon emissions, and we are committed to sustainable solutions.

#### Cutting Our Customers' Carbon Emissions

By converting more of their shipping from trucks to trains, BNSF customers are significantly decreasing their carbon footprint. A single double-stack intermodal train removes more than 280 long-haul freight trucks from the highway. Shipping with BNSF intermodal instead of using entirely over-the-road solutions enabled BNSF customers to reduce their total carbon emissions by 34 million metric tons in 2016.



#### This carbon savings is equivalent to:

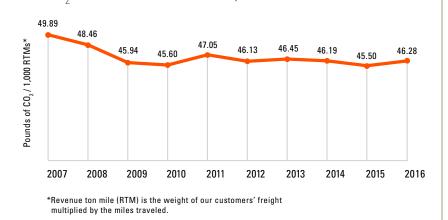
Removing the resultant emissions of



Source: U.S. EPA's Greenhouse Gas Equivalencies Calculator as of April 6, 2017.

#### **Reducing Our Emissions**

Over the last decade, BNSF has upgraded about 40 percent of our locomotive fleet to more energy-efficient technologies, helping us make great strides in increasing fuel efficiency and decreasing CO<sub>2</sub> and particulate emissions. We have also improved fuel efficiency through changes in operations and maintenance practices.



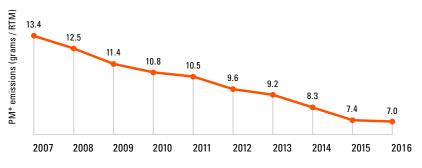
# CO<sub>2</sub> Emissions from Train Operations

#### Fuel Efficiency



\*Gross ton miles (GTMs) are the weight of the train (minus the locomotive) multiplied by the miles traveled.

#### **Diesel Particulate Emissions**

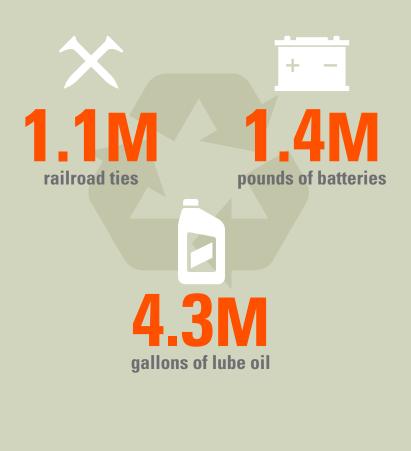


\*Particulate Matter (PM) is a mixture of solid particles and liquid droplets found in the air.

## **Recycling Materials**

Major recycling efforts further reduce BNSF's environmental impact.

#### In 2016, BNSF recycled approximately:





#### **Rehabilitating Legacy Sites**

BNSF is actively addressing environmental impacts at legacy sites where rail operations may have been conducted for up to a century. Over the last decade, BNSF has invested approximately \$550 million in remediation efforts throughout our network. We have completed work and rehabilitated approximately 250 sites.





#### Receiving Recognition for Environmental Stewardship

Praising our "efforts benefiting fish, water quality, habitat and habitat connectivity," the Washington State Department of Transportation (WSDOT) gave BNSF its 2016 WSDOT Environmental Excellence Award. The Otter Creek Restoration Project in Lewis County, Washington, funded by the American Recovery and Reinvestment Act, was part of BNSF's new track construction near Kalama, Washington. BNSF worked closely with the Cowlitz Indian Tribe, the U.S. Army Corps of Engineers, the National Oceanic and Atmospheric Administration and various Washington state agencies to develop a habitat enhancement project on the Cowlitz River that included a complex salmon spawning and rearing habitat.





# EMPLOYEES

BNSF's 41,000 employees are the strength of our railway, and we empower them to lead the way to our future success.

#### **Embracing Diversity**

Diversity is as important to our enterprise as it is to the communities in which we operate. In 2016, 59 percent of our teammates hired were minorities and women. For the tenth consecutive year, we were recognized as a "Best Diversity Company" by the readers of *Diversity/ Careers in Engineering & Information Technology*. BNSF participates in scholarship programs that benefit minority students, and through the BNSF Railway Foundation we support colleges, universities and other organizations, including the American Indian Science and Engineering Society and the United Negro College Fund.





**59%** of our teammates hired in 2016 were minorities and women

#### **Valuing Veterans**

BNSF knows that military veterans possess the experience, determination and dependability to make them great teammates. That is why BNSF employs more than 7,500 veterans. In 2016, approximately 23 percent of all newly hired employees were veterans. The extent to which we value veterans was recognized when BNSF received a Most Valuable Employer for Military Award from

CivilianJobs.com for the ninth consecutive year in 2016. BNSF employs and supports reservists as well, including enabling needed time off for training and deployment.



#### **Training Teammates**

BNSF views our people as a key competitive advantage, and we invest in their training and development so they will be able to meet our high standards for performance. We offer targeted, role-based training and on-boarding to every employee, emphasizing safety, technical expertise and leadership. BNSF teammates learn on best-in-class simulators, through structured on-the-job rotations and from industry experts, their peers and BNSF leaders. Our excellence in training has been recognized by *Training Magazine's* Top 125 list, where we ranked 21st in 2016.



#### **Long-Lasting Careers**

BNSF attracts, develops and retains top talent for long-term careers. We have an average employee tenure of 13 years. A variety of programs promote career development, including our Management Trainee program, Experienced First Line Supervisor program and our First Line Supervisor program. Additional career development offerings include formalized feedback and coaching, mentoring programs, tuition reimbursement and experiential job-rotation assignments. More than 97 percent of our leadership positions are filled with internal candidates.



#### **Honoring BNSF Alumni**

At two different events in the Pacific Northwest about 200 former employees and retirees of BNSF and predecessor railroads gathered for a reception, presentation and discussion in Vancouver, Washington, in the spring and in Seattle later in the fall. The events promoted the BNSF Alumni Association, which is open to anyone who has worked for BNSF or one of our predecessor railroads.

#### Receiving Recognition as a Best Place to Work

*Computerworld* has once again recognized BNSF's technology leadership by placing us on its list of 2016 Best Places to Work in Information Technology. BNSF was ranked number 42 among large companies on this Top 100 list, which BNSF also made in 2006, 2008 and every year since 2011.





Hitti

8184

The people of BNSF care about the communities we call home, and BNSF is proud to support many national and local nonprofit organizations that help make communities stronger.

#### **BNSF Railway Foundation**

The BNSF Railway Foundation is the key vehicle for BNSF to contribute to our communities. In 2016, the Foundation donated \$10 million to deserving causes in communities along our network through scholarships, sponsorships, funding for community groups and more. The BNSF Railway Foundation's Employee Matching Gifts Program leverages the generosity of our employees. The Foundation matches every dollar given, as long as the contribution falls within the guidelines of the program.



# Saluting Military Families on the Holiday Express

BNSF's annual Holiday Express gave military members and their families fun free rides for the ninth year in a row. In 2016, the Holiday Express made stops in Tulsa, Oklahoma; Clovis and Albuquerque, New Mexico; Flagstaff, Arizona; and Barstow California, carrying a grand total of 2,100 passengers (plus Santa). On these specially configured passenger cars, riders enjoy great views, holiday treats and commemorative ornaments. Since its maiden trip in 2008, the Holiday Express has hosted more than 24,000 military personnel and their families, and approximately \$650,000 has been donated primarily by the BNSF Railway Foundation to organizations that support troops and their families.

Since 2008

**24K** military personnel and their families hosted ~\$650K donated to organizations that support troops and their families

#### Honoring Heroes on the First Responder Express

The First Responder Express gives special train trips to police officers, firefighters and other first responders and support personnel and their families in communities across our network. This program is one way we thank the everyday heroes who help keep our communities safe. This year, the First Responder Express made stops in Billings, Montana; Casper, Wyoming; Fargo, North Dakota; Loveland, Colorado; St. Paul,

Minnesota; and Alliance, Nebraska. The BNSF Railway Foundation also awarded grants to local charities that support these communities and their first responders.



#### **Celebrating the Heritage of Special Communities**

Every year we honor communities along our network that embrace their past, present and future ties to freight rail with BNSF Railway's Heritage Community Awards. Festivities typically include dinner and reception aboard special BNSF business cars, and donations from the BNSF Railway Foundation to local nonprofit organizations. Heritage Community Award winners for 2016 included Alliance, Nebraska; Kalama, Washington; Gillette, Wyoming; and Clovis, New Mexico.

# **Strengthening Tribal Relations**

From the Semiahmoo in British Columbia to the United Houma in Southeastern Louisiana, BNSF Railway has strong and deep-rooted relationships with a breadth of Native American tribes. BNSF operates in or adjacent to 86 tribal lands. Our Tribal Relations team is working to deepen relationships with these tribes, to learn about issues, address concerns and help pursue opportunities for economic and other partnerships. In addition, the team also works with engineering, environmental and other departments to provide guidance, training and assistance in cultural resource issues, establishing appropriate communications protocols with tribal governments and other matters. BNSF strives to enhance our role as a neighbor, an economic partner and a fellow steward of the environment and tribal culture.



## **Cultivating Community Spirit**

The Turner Community Garden continues to nurture strong ties between BNSF and the community of Turner in Kansas City, Kansas. The garden's roots go back six years, to when seniors at the community center were looking for an engaging project. When BNSF heard about it, we made it possible for them to use BNSF land adjacent to our Argentine Yard. Today the garden is thriving, yielding thousands of pounds of produce a year. What's not sold at a weekly market is donated to a local soup kitchen.







# **Helping Haiti**

In the wake of the devastation caused by Hurricane Matthew in Haiti in October 2016, BNSF worked with humanitarian organizations and fellow transportation companies to speed relief supplies to survivors. When we learned the relief organization Mission of Hope had 1,000 tons of donations but no way to move them, we volunteered our services. A 1,500-foot relief train was quickly assembled to depart from our Logistics Park Kansas City facility. The train was handed off to CSX in Birmingham, Alabama, which carried it to Jacksonville, Florida. From there the short line Florida East Coast Railway took it to the Port of Everglades in Miami where it was put on a ship to Haiti.



#### BNSF RAILWAY IS A BERKSHIRE HATHAWAY COMPANY.

Berkshire Hathaway and its subsidiaries engage in diverse business activities, including insurance and reinsurance, utilities and energy, freight rail transportation, finance, manufacturing, retailing and services.



#### On the cover:

A BNSF grain train pictured in front of a customer facility near Graceville, Minnesota. The locomotives shown are at the end of the train enabling the use of distributed power, which helps increase efficiency and fuel economy.

