



NORFOLK SOUTHERN 2013 SUSTAINABILITY REPORT

CONNECTIONS

INTRODUCTION



Our Connections

At Norfolk Southern, everything we do is connected. The tracks we lay down are connected to the towns that surround them. Our business is connected to jobs, economies, environmental benefits, and efficient delivery of goods.

These connections create lasting, mutually beneficial relationships with our communities, our employees, our customers, our environment, and our economy. We at Norfolk Southern are looking to strengthen existing connections with our communities and forge new ones. In acknowledgment of this shared future, we will do all we can to ensure that the legacy we leave—social, economic, and environmental—is positive for generations to come.

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This report describes our ongoing activity guided by proven and successful business principles

Wick Moorman, *CEO*

CEO Letter

As a leading freight carrier, our railroad must invest in the communities we serve, and we must be a responsible steward of our environment.

Adherence to those two principles has enhanced and affirmed our understanding of the connections between our long-term business success and the health of our communities, our environment, and our employees. This sixth annual sustainability report highlights those connections and our commitment to best practices of corporate environmental, economic, and social responsibility.

Trains always have been the most fuel-efficient and environmentally friendly form of surface transportation. Today, we're working hard to reduce our greenhouse gas emissions even further. Three years into a five-year initiative to reduce carbon emissions per revenue ton-mile by 10 percent, we've accomplished nearly 69 percent of the goal. In addition to lowering our locomotive fuel burn, we're increasing the energy efficiency of railroad facilities all across our system. We're achieving this through technology, innovation, and, most of all, the ingenuity of our employees, who are dedicated to improving network operating efficiencies.

Beyond operational programs, we are working with private and public partners on carbon mitigation projects. We're continuing our partnership to help reforest 10,000 acres in the Mississippi Alluvial Valley. We also have directed more of our charitable giving toward forestry management projects that improve the quality of forest ecosystems. Across our 22-state system, Norfolk Southern employees contribute their time, talent, and treasure to volunteer activities that enrich the communities we serve.

Sustainability has become part of the culture of Norfolk Southern, much as safety and service define who we are as a company. We're fundamentally changing our operating culture to create an even safer, more positive work environment in which our people can excel. This report describes our ongoing activity guided by proven and successful business principles of investing in employees and communities while protecting the environment for future generations.



WICK MOORMAN
Chairman and CEO



Wick Moorman, CEO,
Norfolk Southern

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

1.1

1.2

CSO Letter

The first six years of Norfolk Southern's sustainability journey have taught us much about the connection between corporate responsibility and business success. One thing stands out for me as a cornerstone of continuous progress – employee engagement.

Employee engagement is the heart and soul driving our sustainability initiatives. The active participation of our employees is embedding sustainability into our operational fabric. I see and hear signs that employees are thinking about how natural occurrences affect business operations. For example, one employee engaged me in discussion about the implication of rising sea levels on rail facilities. Others have pursued achieving energy savings beyond locomotives and expanding recycling efforts. These anecdotal observations tell me that employees throughout the company – not just the “sustainability officers” – are living and thinking corporate responsibility.

These signs are gratifying. They will help define our future. In the formative years of our sustainability program, we focused on efficiency improvements and made incremental progress. Over the next five years, with the full engagement of our people, we will look at a spectrum of energy programs, fuel and nonfuel. We will want to complete implementation of our flagship fuel-efficiency project, LEADER, which helps us conserve fuel, reduce emissions, and lower the costs of maintaining locomotives. We'll continue also with network capacity enhancements. The convergence of these efficiency improvements—energy, fuel, and network—ultimately will optimize capacity to deliver service, improve velocity, and reduce congestion on the system.

That's the real success of sustainability—employee engagement leading to ongoing industry leadership in safety, operations, and environmental stewardship, all playing out in daily railroad life.

**BLAIR WIMBUSH**

Vice President Real Estate
and Corporate Sustainability Officer



Blair Wimbush, CSO,
Norfolk Southern

1.2

Description of key impacts, risks and opportunities, how these are prioritized, performance progress and processes, how sustainability impacts financial performance, a table outlining performance targets, and governance mechanisms in place to manage these risks and opportunities.

About Our 2013 Report

This is Norfolk Southern's sixth annual corporate sustainability report. It details our sustainability activities and performance data during calendar year 2012, unless otherwise noted.

Norfolk Southern declares that this report complies with the Global Reporting Initiative's 3.1 Level C reporting standards. Accordingly, the report discloses the railroad's significant environmental, economic, and social impacts to help stakeholders assess our commitment to corporate sustainability. Our stakeholders include shareholders, customers, employees, government and nongovernmental organizations, industry partners, and the communities we serve.

The report discloses our ongoing efforts to achieve balance between business imperatives and social commitments to mitigate unavoidable environmental impacts of railroad operations. We strive to deliver the most competitive service to customers and earn a solid return for shareholders, while respecting the interests of employees, communities, and the environment with which we are connected. Our long-term success as a company requires that we meet our present business needs without compromising the ability of future generations to meet their own needs.

Norfolk Southern's formal sustainability program is managed by our corporate sustainability officer, a position appointed by the corporation's board of directors. The CSO reports to the chair of the company's Environmental Policy Council. The council is composed of senior managers and ensures that appropriate policies, procedures, and resources are in place to address environmental issues across our rail system, including activities deemed related to climate change. The CSO provides status reports to the council, which reports directly to Norfolk Southern's chief executive officer.

This report was prepared under the supervision and direction of the CSO and was reviewed for accuracy and reliability by the CSO, an intra-departmental corporate sustainability team, and Norfolk Southern subject matter experts.

Norfolk Southern welcomes feedback on our annual sustainability report and invites you to send comments and suggestions to footprints@nscorp.com.

THIRD-PARTY REVIEW

Norfolk Southern contracted with auditing firm KPMG LLP to review the raw data and methodologies we followed to calculate our greenhouse gas emissions in calendar year 2012. We believe this review adds credibility to the data we provide to stakeholders, including investors who may factor the contents of this report into their investment decisions.

The assurance letter provided by KPMG and the emissions data reviewed by the auditor are included in the Environmental Performance section of this report.

- **Read the Independent Accountant's Report on our online report**
- **See the 2012 Greenhouse Gas Emissions data in the Carbon section of this report**

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

3.1

3.5

3.6

3.13

4.14

4.15

Sustainability: The Big Picture

Companies that ship products over the U.S. freight transportation network can lower their carbon footprint by moving more of their goods by rail instead of by highway. A single train can move the equivalent of nearly 300 tractor-trailer trucks while emitting a fraction of the greenhouse gases (GHGs).

While absolute locomotive emissions may increase as railroads run more trains to accommodate business growth, shifting more goods to rail makes environmental sense. As the international community looks for ways to reduce GHGs to address climate change, we want to do our part. By doing what we do best—moving essential goods safely, efficiently, and cost-effectively—our railroad can help lower overall carbon emissions on a regional, national, and global basis.

Because Norfolk Southern operates the most extensive intermodal rail network on the East Coast, we are well positioned to contribute to the nation's economic growth and environmental health.

FREIGHT RAIL'S ENVIRONMENTAL ADVANTAGE

Scientific research and government accounting of GHGs by emission sources reveal that rail is the most environmentally friendly way to ship goods over land.

An independent study conducted for the Federal Railroad Administration in 2009 concluded that trains on average are nearly four times more fuel-efficient than trucks on a ton-mile basis. That means moving goods by rail instead of over the highway reduces greenhouse gas emissions by 75 percent on average per ton-mile.

The EPA's 2011 Inventory of U.S. Greenhouse Gas Emissions and Sinks also offers evidence of rail's environmental benefits:

- **Within the nation's transportation sector, the trucking industry accounted for 22.1 percent, or 401 million metric tons, of GHG emissions. In comparison, the freight rail industry generated 2.3 percent, or 42 million metric tons, of GHG emissions.**
- **Among all sources of GHG emissions in the United States, trucking generated 6 percent of the total. Freight railroads generated 0.6 percent of the total.**

Moving freight by rail is an easy, cost-competitive, and immediate way to achieve significant reductions of GHG emissions. If only 10 percent of long-haul freight now moving by truck moved by rail instead, annual U.S. GHG emissions would fall by about 11 million tons—equivalent to taking nearly 2 million cars off the road or planting more than 250 million trees.

In addition, using trains instead of long-haul trucks reduces congestion on interstate highways. The most recent study by the Texas Transportation Institute concluded that, in 2011, highway congestion wasted 2.9 billion gallons of fuel and 5.5 billion hours of people's time. Transporting freight by rail also reduces wear and tear on highways and bridges, which means taxpayers spend less on maintenance and construction of road infrastructure.

Sustainability Reporting

Our sustainability journey

Norfolk Southern views corporate sustainability as a journey that is continually evolving. Since CEO Wick Moorman and his senior executive team decided in 2007 to begin a formal corporate sustainability program, our efforts have expanded from the C-suite to field facilities all across the railroad.

Employees are engaged, looking for innovative, money-saving ways to reduce the environmental impacts of business operations at yard and shop facilities across our system. Our Operations Division departments now include specific goals for fuel efficiency improvements—a key to achieving our sustainability goal to reduce greenhouse gas emissions. Several departments have incorporated green-building initiatives into their capital program when cost-effective. During the past year, our Mechanical Department has replaced heating systems in several buildings to cleaner-burning and lower-cost natural gas.

In addition, we have improved the transparency of our operations and the scope of our disclosures since we issued our first sustainability report six years ago. Those changes reflect the importance we place on environmental stewardship and on being a good corporate neighbor to the communities we serve.

Some examples of our steady progress in sustainability are:

2008

- We published our first sustainability report. The report, for calendar year 2007, was a major accomplishment of a newly formed sustainability team directed by Blair Wimbush, vice president, real estate, and corporate sustainability officer. His 2007 appointment made him the rail industry's first CSO and signified our commitment to industry leadership in sustainability.
- We donated a conservation easement to protect more than 12,000 acres at our Brosnan Forest property near Charleston, S.C. The donation, one of the largest land gifts in the Southeastern U.S., permanently protects 6,000 acres of rare longleaf pine forest and the largest U.S. population of endangered red-cockaded woodpeckers on private lands.

2009

- We documented and published for the first time the amount of greenhouse gas emissions generated by our business operations.
- We unveiled NS 999, a prototype battery-operated switcher locomotive, a first-of-its-kind for the rail industry.

2010

- We announced a five-year goal to reduce our carbon emissions by 10 percent per revenue ton-mile between 2009 and 2014.
- We helped GE Transportation pioneer the development of Movement Planner to improve the flow of train traffic across our network. The effort is designed to improve asset utilization, increase track capacity, and reduce congestion and delays that cause unnecessary fuel burn and emissions.

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

3.5

3.6

3.11

- We opened our Heartland Corridor to double-stack intermodal trains, reducing mileage and transit time—as well as fuel use and carbon emissions—of trains moving international goods between Virginia port terminals and Midwest consumer markets.

2011

- We launched Trees and Trains, a \$5.6 million initiative to reforest 10,000 acres of former woodlands in the Mississippi Alluvial Valley.
- We began developing a carbon mitigation strategy that involves working with private and public partners to mitigate the environmental impact of our business operations. The strategy includes developing projects to preserve natural resources within our service areas, including reforestation and land restoration projects.
- Our Arnold B. McKinnon headquarters building in Norfolk earned the U.S. Environmental Protection Agency's ENERGY STAR® rating, the national symbol for protecting the environment through energy efficiency.
- We collaborated with GE Transportation to present the railroad industry's first sustainability symposium, bringing together industry and other sustainability experts to discuss sustainability best practices.

2012

- We contracted with an auditing firm to provide an independent, third-party review of the data and methodologies we use to calculate our annual greenhouse gas emissions. Our aim was to add credibility and transparency to our disclosure of carbon emissions data.
- We reported Scope 3 emissions for the first time, representing estimated emissions from purchased electricity consumed at facilities leased by Norfolk Southern.

2012 Sustainability Highlights

ENVIRONMENTAL

- Reached nearly 69 percent of our 2014 goal of reducing the company's greenhouse gas emissions by 10 percent per revenue ton-mile, lowering our intensity of carbon emissions from 2011 levels by nearly 1.1 percent per revenue ton-mile
- Reduced our absolute emissions of carbon dioxide equivalents by 4 percent
- Lowered our Scope 2 carbon emissions by more than 3 percent, reflecting efforts to conserve and reduce electricity usage at our office buildings and railroad facilities
- Completed 40 percent of our Trees and Trains project, a \$5.6 million initiative to reforest 10,000 acres in the Mississippi Delta
- Outfitted nearly half of our locomotive fleet with LEADER, a GPS-based computer system installed in locomotive cabs that prompts engineers on optimum speeds for achieving maximum fuel efficiency
- Equipped 72 percent of our locomotive fleet with idling reduction technology to avoid unnecessary fuel burn and emissions
- Expanded our locomotive rebuild program to include 1980s-era Dash 8 locomotives, reusing their frames and platforms and equipping them with cleaner-burning, more fuel-efficient engines
- Began using an indoor emissions-testing facility constructed at our Juniata Locomotive Shop to help us achieve in-house development of locomotive engines that are more cost-effective, more fuel-efficient, and cleaner-burning
- Became the first railroad to use a 100 percent renewable synthetic diesel fuel produced from waste animal fat and grease
- Opened new regional intermodal terminals in Rossville, Tenn., and McCalla, Ala., with administrative buildings constructed using LEED (Leadership in Energy and Environmental Design) Certification standards to reduce energy and water use
- Became a founding member and supporter of Destination Gigaton, an initiative developed by the Carbon Disclosure Project® and the World Wildlife Fund to encourage industry to reduce greenhouse gases by one gigaton by 2020

ECONOMIC

- Surpassed \$11 billion in railway operating revenues for the second consecutive year and achieved our second-best year ever for revenue, operating income, net income, and earnings per share
- Invested a record \$2.24 billion in capital projects, focusing on maintenance and replacement of rail infrastructure, upgrades to our locomotive fleet, and construction projects at facilities and terminals
- Helped locate 64 new industries and expand 30 existing industries across our network, representing a \$2.1 billion investment by customers expected to create more than 6,100 jobs and generate more than 141,000 carloads of new rail traffic annually
- Completed the first phase of our 11-state Crescent Corridor improvement program, including the opening of two regional intermodal terminals in 2012 and a third in early 2013

- Moved a record 3.1 million units of conventional intermodal freight, which includes domestic, international, and premium traffic, with overall intermodal volume up 5 percent, driven by an 11 percent increase in domestic volume

SOCIAL

- Achieved our second-best year ever in safety performance, with 239 federally reportable injuries in a workforce of more than 30,000, equating to a ratio of 0.81 injuries per 200,000 employee-hours
- Donated \$6.98 million to local communities through our Norfolk Southern Foundation, a nearly 13 percent increase over 2011, for needs such as human services, environmental conservation, education for children, and arts and culture
- Hired approximately 2,300 new employees across our network, with the majority joining our unionized workforce, including conductor trainees, track laborers, signal trainees, carmen, and firemen/oilers
- Introduced behavioral science processes into our operations departments to improve safety and service and create a more positive work environment
- Commissioned a one-of-a-kind “Veterans Locomotive,” painted in patriotic colors, to honor military veterans
- Contributed more than 3,200 hours of community service—the equivalent of 80 40-hour work weeks—through our Thoroughbred Volunteers program in Roanoke and Norfolk, Va., Atlanta, Ga., and Harrisburg, Pa.
- Worked with Virginia to provide Amtrak passenger rail service to Norfolk on a 77-mile stretch of our track, helping to create a passenger rail link from Norfolk to Boston

Awards & Recognition

Norfolk Southern strives to be the industry leader in all areas of corporate sustainability, including commitments to reduce our environmental footprint, to be a good corporate citizen, and to deliver top-notch service to customers. We are honored and gratified when our efforts to improve are recognized by others.

ENVIRONMENTAL PERFORMANCE

- Won American Carbon Registry's 2012 Corporate Excellence award
- Achieved our best-ever carbon disclosure score in the 2012 CDP S&P 500 Climate Change Report
- Ranked as top railroad in the S&P 500 Clean Capitalism Ranking released in February 2012 by Corporate Knights
- Ranked as top U.S. railroad in *Newsweek's* 2012 Green Rankings
- Named to *Inbound Logistics* magazine's 2012 list of 75 Green Supply Chain Partners

SOCIAL PERFORMANCE

- Earned a 2012 National Achievement Award from TRANSCAER® for helping communities prepare for and respond to potential hazardous materials transportation incidents
- TRANSCAER's Torch Award won by employee William J. "Bill" Oertly in recognition of his lifetime achievement
- Named by CivilianJobs.com to its 2012 list of Most Valuable Employers for Military® for our commitment to hiring veterans
- Named by *G.I. Jobs* magazine to its Top 100 Military Friendly Employers®
- Ranked No. 4 among transportation and automotive sector companies in 2012 for employee adoption benefits by the Dave Thomas Foundation for Adoption

ECONOMIC PERFORMANCE

- Earned customer service recognition from UPS for the second consecutive year for delivering failure-free service during the parcel carrier's "peak season," between Thanksgiving and Christmas
- Tied for highest overall score among rail and intermodal service providers in *Logistics Management* magazine's 2012 "Quest for Quality" reader survey
- Listed during 2012 as a Top 25 Socially Responsible Dividend Stock by Dividend Channel, an online investment research website owned by BNK Invest Inc.

2.10

Awards received during the period.

ENVIRONMENTAL PERFORMANCE

Norfolk Southern strives to be the rail industry leader in fuel conservation, emissions reduction, efficient energy use, recycling, and environmental partnerships.

Our goal is to strengthen connections with the environment and the communities we serve to ensure that the railroad's activities generate benefits for generations to come.

We have adopted a broad approach to reduce our carbon footprint and other unavoidable impacts of our business operations. Our primary strategies focus on ways to reduce emissions from our two largest sources—locomotives and facility energy use. Beyond operations, we work with private and public partners on reforestation and other conservation projects to mitigate our business impacts.

IN THIS SECTION

[ENVIRONMENTAL POLICY COUNCIL](#)

[CARBON](#)

[ENVIRONMENTAL MANAGEMENT](#)

[WASTE](#)

[MOVING BEYOND CARBON](#)

[ENVIRONMENTAL PARTNERSHIPS](#)

Environmental Policy Council

Sustainability at the top

Sustainability at Norfolk Southern starts at the top. Wick Moorman, our CEO, began championing the creation of a formal sustainability program in 2007. He assigned oversight to our Environmental Policy Council.

The council, comprised of senior executives including department heads, has long been a testament to our commitment to environmental stewardship. It was formed in the mid-1990s to ensure that the railroad was in compliance with government rules and regulations and with corporate policies regarding environmental issues. Our corporate sustainability officer is now a member.

Among the FORTUNE 500 companies we compare ourselves with, Norfolk Southern was a leader in forming a council of this type. While monitoring compliance issues remains a big part of the council's work, it now plays a key role in sustainability, ensuring that all departments are aware of and contributing to the company's efforts.

"We do not just pay lip service to the concept of sustainability," said council chair, Deb Butler, our executive vice president of planning and chief information officer. "The whole company owns the sustainability process. We are doing everything we can to promote sustainability, not only internally, but also externally, to ensure that we are positioned as a sustainable, responsible company."

The council presents a forum where significant initiatives can be reported, internal programs discussed, and issues quickly resolved because all department heads with the authority to enact change are at the table. Part of its work is reviewing best practices in corporate sustainability and examining what other railroads are doing to reduce their business impacts on the environment.

As CIO, Butler oversees development and implementation of many of the technologies Norfolk Southern is adopting to improve operating efficiencies and customer service. One of her primary interests is how those same technologies can contribute to sustainability.

"The idea of using technology to improve locomotive fuel efficiency and to take advantage of freight rail's position as an environmentally responsible mode of transportation appeals greatly to me," Butler said.

Norfolk Southern's conservation efforts hit home for Butler. Our Trees and Trains initiative to reforest former woodlands in the Mississippi Delta resonates with her because she grew up on the Mississippi and witnessed the river's annual flooding—something the tree planting will help alleviate. She also applauds the company's efforts to protect our Brosnan Forest property near Charleston, S.C. The Forest is home to rare stands of longleaf pine and endangered red-cockaded woodpeckers.

"You can talk about sustainability as being the right thing to do, and you can get into the marketing area and the political area of positioning ourselves as environmentally responsible," Butler said. "In the end, I think it's personal as well."



Deb Butler, Executive Vice President of Planning, Chief Information Officer, and Chair of Environmental Policy Council, Norfolk Southern

66

Corporate Knights S&P 500
Clean Capitalism: NS
Ranked 66

CLEAN CAPITALISM

Norfolk Southern earned the top ranking among railroads in the S&P 500 Clean Capitalism Ranking released in February 2012 by Corporate Knights, a media, research, and financial products company that focuses on clean capitalism. Among S&P 500 companies overall, Norfolk Southern ranked 66.

The ranking rated S&P 500 companies based on 11 key performance indicators, including carbon productivity, energy productivity, safety productivity, CEO-to-average employee pay ratio, leadership diversity, and percent of tax paid in cash. The data were collected by Corporate Knights and verified with The Bloomberg Professional service. Companies were ranked relative to their industry peers.

Carbon

Reducing greenhouse gas emissions

Our railroad continued making strides in 2012 to reduce carbon emissions associated with business activities. It reflects our work to improve operating efficiencies, reduce locomotive fuel burn and emissions, upgrade our locomotive fleet with low-emission, fuel-efficient engines, and lower energy usage at railroad office buildings and facilities.

IN THIS SECTION

SOLID PROGRESS

CARBON FOOTPRINT AND STRATEGY

FUEL EFFICIENCY

ENERGY EFFICIENCY

CARBON MITIGATION THROUGH CONSERVATION

EN18

Initiatives to reduce greenhouse gas emissions and reductions achieved.

Our goal: To reduce carbon emissions by 10 percent per revenue ton-mile between 2009 and 2014

Status: We have reduced carbon emissions by 6.89 percent per revenue ton-mile, accomplishing nearly 69 percent of our goal by the end of 2012

Solid Progress

Norfolk Southern accomplished two milestones in 2012 to reduce the company's carbon footprint.

First, we continued making gains on our five-year goal to reduce greenhouse gas emissions. For the year, we reduced our carbon emissions intensity by nearly 1.1 percent per revenue ton-mile over 2011.

Second, we reduced our absolute emissions of CO₂ equivalents by 4 percent compared with 2011, generating 5.18 million metric tons vs. 5.4 million metric tons. Much of the reduction is attributed to a 3 percent decline in business volume as measured by revenue ton-miles and a corresponding 3 percent decline in locomotive diesel fuel use. However, we reduced emissions above and beyond the drop in business volume and fuel use, an indication that our efforts to improve fuel and operating efficiencies played a role.

By category, we reduced Scope 1 emissions by nearly 4 percent. Those emissions are associated directly with business activities, primarily locomotive diesel-burn. We reduced Scope 2 emissions by more than 3 percent. Those emissions are generated by the utility companies that supply our facilities with electricity, and we attribute the decline in part to a systematic effort to conserve and reduce power usage at our office and railroad facilities.

HOW WE MEASURE PROGRESS

We calculate progress on our emissions-reduction goal using 2009 performance data as a baseline. That year, we transported 158.5 billion revenue ton-miles of freight and produced emissions of 29.96 grams of carbon dioxide equivalents per revenue ton-mile. We rounded the baseline to 30 grams, which means we must reduce our emissions to 27 grams per revenue ton-mile to reach our 10 percent goal.

In 2012, we generated 27.89 grams of CO₂ equivalent emissions per revenue ton-mile.

The use of revenue ton-miles, or RTM, is an accepted metric in the transportation industry to measure business activity. We derive our annual RTM by multiplying the tonnage of paid freight we move by the number of miles it is transported. As such, RTM represents the railroad's basic unit of production—the amount of work required to move one ton of freight one mile.

Measuring emissions on this normalized basis allows us to evaluate how well we are controlling our carbon footprint even as business activity declines or grows from year to year. For example, our business volume in terms of RTM increased by 15 percent in 2010 over 2009 as the economy recovered from recession. The increased volume resulted in a 10 percent increase in absolute carbon emissions—well below the growth in business activity. That indicates the company's strategic efforts to reduce emissions were effective.

The same held true in 2011, when our business volume rose by 5 percent, but emissions rose by only 3 percent.

Our aspirational goal as a corporation is to achieve absolute reduction in CO₂ equivalent emissions even as business activity increases. We are pleased with the progress we have made and are committed to continuous improvement in our sustainability performance.

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

3.9

EN18

We reduced our absolute emissions of CO₂ equivalents by 4 percent compared with 2011

EXCELLENCE IN REDUCING EMISSIONS

In 2012, the American Carbon Registry gave Norfolk Southern its Corporate Excellence award for our public commitment to measure and reduce greenhouse gas emissions.

The ACR cited our five-year corporate goal to reduce carbon dioxide emissions and our tree-planting partnership with GreenTrees to reforest 10,000 acres in the Mississippi Alluvial Valley. The organization also noted our work to improve locomotive fuel economy, energy efficiency of buildings and railroad facilities, and network operating efficiencies.

The ACR, a nonprofit enterprise, is a leading carbon offset program recognized for its strong standards for environmental integrity. It was founded in 1996 as the first private voluntary greenhouse gas registry in the world.

Carbon Footprint and Strategy

2012 carbon footprint

In 2012, Norfolk Southern Corporation's business activities generated 5.18 million metric tons of carbon dioxide-equivalent emissions, while delivering more than 185 billion revenue ton-miles of freight for customers.

We calculated emissions generated by the corporation's primary operating subsidiary, Norfolk Southern Railway Company, and other operating subsidiaries.

Our diesel-burning locomotive fleet—railroad workhorses that operate in long-haul, local, and yard service—generated 90 percent of the total CO₂ equivalent emissions, or 4.67 million metric tons. That total includes 113,530 metric tons from use of biodiesel at railroad fueling facilities in Chicago and Decatur, Ill.

Electricity usage at company-owned facilities accounted for our second-largest sources of emissions, at 4.9 percent, or 252,854 metric tons of CO₂ equivalents. All of these facilities, including office buildings, terminals, yards, and shops, are located in the United States.

Our third-largest single contributor to emissions in 2012 was our on-road gasoline company vehicle fleet, which produced 69,098 metric tons of CO₂ equivalents, or 1.3 percent of total emissions.

The remaining nearly 4 percent of emissions is attributed to our use of a combination of other fossil fuels. In order of magnitude, those other sources were fuel oil, non-locomotive diesel, natural gas, coal, non-vehicle gasoline, propane, jet fuel, and kerosene.

Based on accepted standards for corporate disclosure of greenhouse gas emissions, we report Scope 1, Scope 2, and certain Scope 3 emissions. Scope 1 emissions are generated directly by our business operations, such as locomotive use. Our Scope 2 emissions are generated by the utilities that supply us with power.

Our Scope 3 emissions are estimates of CO₂ equivalent emissions from three sources: employee business travel by commercial air, employee business travel in personal vehicles, and purchased electricity consumed at facilities leased by Norfolk Southern. Combined, we estimated Scope 3 emissions of 5,780 metric tons of CO₂. We calculated estimated emissions from travel using the GHG Protocol Transport Tool; we calculated the electricity emissions using the GHG Protocol Purchased Electricity Tool and the U.S. Energy Information Agency report on average energy consumption per square-foot for office facilities.

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:



CDP 2012 climate change report: ranked 88/100 for disclosure and a "B" for performance

EMISSIONS (IN METRIC TONS CO₂e)

	SCOPE 1	SCOPE 2	SCOPE 3
CO ₂	4,879,618	251,534	5,768
CH ₄	9,358	107	2
N ₂ O	36,262	1,213	10
HFCs	0	0	0
PFCs	0	0	0
SF ₆	0	0	0
SUBTOTAL	4,925,238	252,854	5,780
TOTAL 5,183,872 MT CO ₂ e TOTAL CO ₂ EQUIVALENT EMISSIONS			

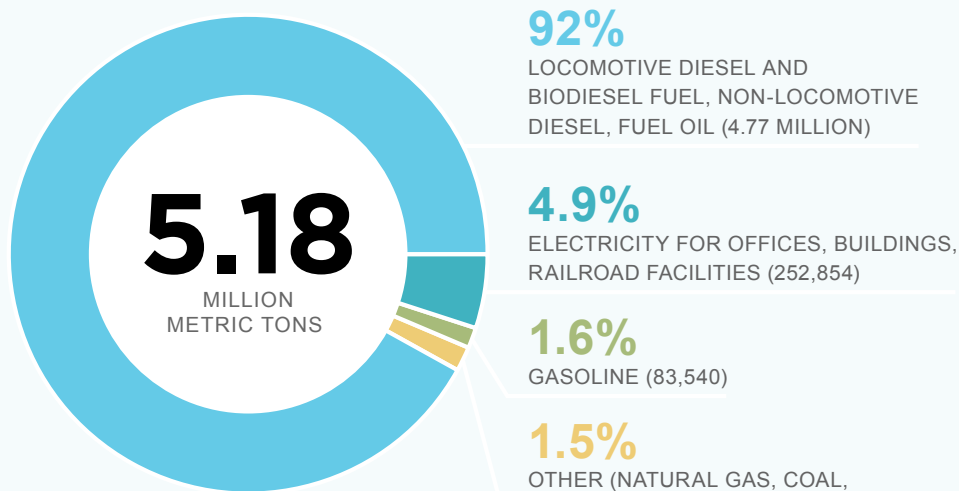
Auditing firm KPMG LLP reviewed the raw data and methodologies that Norfolk Southern followed to calculate our 2012 greenhouse gas emissions, as presented in the above chart of the railroad's CO₂ equivalent emissions. To read the assurance letter provided by KPMG, please view our online report.

NORFOLK SOUTHERN EMISSIONS

	2009	2010	2011	2012
TOTAL SCOPE 1 AND SCOPE 2 EMISSIONS OF CARBON DIOXIDE EQUIVALENTS (MILLION METRIC TONS)	4.7	5.2	5.4	5.18
EMISSIONS PER REVENUE TON-MILE (GRAMS)	29.96	28.78	28.19	27.89
TOTAL REVENUE TON-MILES OF FREIGHT MOVED (\$ BILLIONS)	158.5	181.9	191.7	185.6
TOTAL RAILWAY OPERATING REVENUES (\$ BILLIONS)	7.9	9.5	11.2	11

PERCENTAGE OF CARBON DIOXIDE EMISSIONS BY SOURCE

emissions of CO₂ equivalents, in metric tons



OUR BEST CARBON-DISCLOSURE SCORE

Norfolk Southern in 2012 achieved its best-ever carbon disclosure score in the S&P 500 Climate Change Report.

The report, released by CDP, formerly known as the Carbon Disclosure Project, scored our company at 88 on a scale of 0–100. That is 15 percent better than our 2011 score of 76, and our highest score in the five years we have participated in the survey.

In addition, CDP gave us a grade of B on carbon performance. That matched our 2011 performance and was an improvement over the C we received in 2010.

We enhanced our carbon disclosure process in 2012 by contracting with an independent auditing firm to conduct a third-party review of our greenhouse gas emissions data.

“The 2012 result exceeded our goal and puts Norfolk Southern in the high range of companies disclosing, well above the average disclosure score of 70,” said Blair Wimbush, our vice president of real estate and corporate sustainability officer. “This positive trend complements our sustainability goal to achieve industry leadership in fuel conservation, emissions reduction, efficient energy use, recycling, use of renewable materials, and environmental partnerships.”

CDP is an independent nonprofit organization supporting greenhouse gas emissions reduction and sustainable water use. The scores released in its annual Climate Change Report are regarded as a measure of climate mitigation performance and quality of disclosure. The group collects data from the world’s largest companies on behalf of 655 institutional investors with combined assets of \$78 trillion. For CDP’s 2012 report, more than 3,000 companies—81 percent of the Global 500 and 68 percent of the S&P 500—responded to a climate change questionnaire.

Fuel Efficiency

Focus on fuel efficiency

For economic and environmental reasons, Norfolk Southern has significant interests in improving the fuel economy of our locomotive fleet. At around \$1 billion a year, the bill for diesel fuel to power our locomotives is one of the railroad's single largest operating expenses. In addition, locomotives are the largest source of our greenhouse gas emissions.

During 2012, our average locomotive fuel efficiency remained on par with our 2011 performance. Our revenue trains moved a ton of freight an average 407 miles on a gallon of diesel fuel. We maintained that high degree of efficiency even as our traffic mix shifted in 2012 to include growth in time-sensitive freight and a significant decline in coal traffic. To meet customer service demands, trains moving time-sensitive freight must operate at a higher horsepower, thus consuming more fuel. Unit coal trains are among our most fuel-efficient because of their heavier loads and generally downhill delivery routes from mountain mining sites.

Over the past five years, our rate of fuel consumption has decreased by an average of about 1 percent a year. We attribute that at least in part to our strategies to deploy technologies and techniques to improve fuel efficiencies. We have been an industry leader in developing certain technologies, and we now are reaping benefits as they mature and are being deployed across our network.

Some of the major initiatives include:

- **Computer-based systems to improve train crew handling of locomotives over primary rail lines, including Crescent Corridor and Heartland Corridor**
- **Technologies to increase operating efficiencies of trains moving across our network**
- **A program to reduce unnecessary locomotive engine idling**
- **An in-house locomotive rebuild program that is equipping them with like-new engines that are more fuel-efficient and cleaner running**
- **Pursuit of alternative fuels, including battery-powered electric locomotives**
- **Trackside technologies to improve train performance**

IN THIS SECTION

GREEN SUPPLY CHAIN LEADER

OUR KEY FUEL EFFICIENCY INITIATIVES

LOCOMOTIVE REBUILD PROJECTS

ALTERNATIVE POWER PROJECTS

Green Supply Chain Leader

Inbound Logistics magazine named Norfolk Southern to its 2012 list of 75 Green Supply Chain Partners.

Companies were selected based on involvement in public-private partnerships, corporate sustainability initiatives, and collaborative customer-driven projects. The magazine compiled the list from more than 200 transportation and logistics companies, looking for companies leading by example to produce measurable green results, sustainability innovation, continuous improvement, and industry recognition.

The magazine cited Norfolk Southern's focus on maintaining a fuel-efficient locomotive fleet as a cornerstone of our sustainability efforts.

Through innovation, perseverance, and partnership, we are helping to introduce technology that could revolutionize the way railroads operate.

TOP-RANKED GREEN RAILROAD

In *Newsweek's* 2012 "Green Rankings," Norfolk Southern was the top-ranked railroad and No. 8 among companies in the transportation and logistics sector. (Norfolk Southern's largest premium-freight intermodal customer, UPS, was ranked No. 1 on the sector list.) Overall, Norfolk Southern was ranked No. 181 among the 500 largest publicly traded U.S. companies—an improvement from 398 in 2011—and No. 300 among the 500 largest global companies, an improvement from 454 in 2011.

Newsweek singled out Norfolk Southern for significant year-over-year improvement in environmental performance. In an online report, *Newsweek* cited our efforts to boost locomotive fuel efficiency, our goal to reduce greenhouse gas emissions, and our use of new technology to reduce the environmental impacts of business operations.

The rankings are based on a combined measure of green indicators, including an assessment of a company's environmental footprint, management of that footprint, and transparency. Company size was determined by revenue, market capitalization, and number of employees.



Newsweek Green Rankings:
No. 8 among companies
in the transportation and
logistics sector

Our Key Fuel Efficiency Initiatives

A LEADER IN TRAIN HANDLING

A technology known as LEADER is our flagship fuel-efficiency initiative. By the end of 2012, we had equipped 1,160 road locomotives—nearly half of our long-haul road fleet—with the Locomotive Engineer Assist Display Event Recorder train-handling system.

LEADER provides locomotive engineers with real-time information about a train's operating conditions. Norfolk Southern helped New York Air Brake Corporation develop the pioneering GPS-based computer system. An on-board computer calculates and displays the optimum train speed to achieve maximum fuel efficiency based on conditions such as topography, track curvature, and the train's length and weight.

Operating results indicate the technology is generating a 5 percent fuel-efficiency advantage on average when a LEADER-equipped locomotive is used as the lead unit in a consist of locomotives. Different territories can yield higher or lower average fuel savings depending on the operating terrain.

LEADER-assisted trains are running on some of the busiest lines on all three of our operating regions. Our plan is to outfit all of our road locomotives with LEADER and continue expanding its use across our network.

'ENHANCED' LOCOMOTIVE REBUILDS

We have developed an aggressive capital rebuild program at our Juniata and Roanoke locomotive shops. It involves recycling older locomotive bodies and installing more fuel-efficient, lower-emission engines.

GREENER ALTERNATIVES

To reduce carbon emissions and reliance on fossil fuels, we are working to develop nontraditional locomotives and alternative energy sources to power our locomotive fleet.

REDUCED TRAIN IDLING

By the end of 2012, 72 percent of our locomotive fleet had been outfitted with idle-reduction technology to reduce fuel burn, up from 66 percent in 2011. That includes 2,348 locomotives equipped with automatic start-stop systems, a 13 percent increase over 2011. The start-stop system either shuts off or starts an engine without operator action, based on engine parameters monitored by a microprocessor system. Our plan is to install start-stop systems on the entire fleet by the end of 2014, far ahead of any regulatory mandate.

We also have several hundred locomotives outfitted with auxiliary power units. The APUs maintain vital systems while a locomotive's engine is shut off, eliminating the need for idling to maintain proper engine temperature in cold weather. We gradually are replacing APUs with more technologically advanced start-stop systems.

We have a plan to install stand-by electric power stations at some terminal facilities, allowing us to shut down locomotive engines and plug them into the stations to keep engine components warm during cold weather.

Under a company idle-reduction policy, shop and terminal employees are instructed to shut down locomotives unless there is an operational need for idling. We monitor progress on a scorecard to rank operating divisions for their contributions to fuel conservation. We document compliance through physical audits, and we are working on a wireless system to monitor progress.

EMPLOYEE EDUCATION

Technology is only as good as our employees can make it. For that reason, we have training programs to ensure that train crews and other operations' employees fully use the available tools and techniques. Engineers go through training, for example, to learn how to use LEADER. Training modules also have been developed for Mechanical Department employees who install and maintain engine start-stop systems and are available for other operations' employees who need knowledge of idle-reduction technologies.

Bulletin board posters are distributed to all rail yards to remind employees about the company's idle-reduction policies.

PIONEER TOP-OF-RAIL SYSTEM

Norfolk Southern is a pioneer in use of technologies to improve the interaction of steel wheels and rail to save on fuel and maintenance costs. Our Research and Tests Department worked with industry collaborators to develop a top-of-rail friction modification system that we are installing along curved sections of track to reduce the rolling resistance as trains run through the curves. As a train approaches, the wayside systems dispense a gel-like lubricant on top of both rails, which reduces the friction between car wheels and rails and the amount of energy needed to pull a train around the curve.

Rail corridors equipped with top-of-rail systems generate an estimated 2 percent in fuel savings. In addition, they reduce wear and tear and maintenance costs on track and car wheels.

A solar array powers the systems, enabling us to save on electricity costs and install the dispensers in remote areas that lack conventional power sources. By the end of 2012, we had installed 914 of the systems, a 35 percent increase over 2011.

WAYSIDE DETECTING

As remote-sensing technology advances, Norfolk Southern is relying more on wayside detectors to increase safety of operations, better maintain track infrastructure, and reduce fuel and other operating costs. By the end of 2012, we had installed 14 wheel-impact load detectors on our heaviest tonnage routes to detect defective car wheels that result in wasted fuel and excessive track wear.

We are helping to develop additional wayside detectors, including acoustic bearing detectors, warped truck detectors, hunting truck detectors, and wheel profilers. They all are designed to improve rail safety and operating efficiency, including reducing fuel use and maintenance costs.

BETTER WHEELS

We have begun equipping 100 percent of our railcar wheels with low-torque roller bearings at wheel renewal change-outs. The bearing manufacturer estimates fuel savings of 1 to 2 percent over the older bearings they replace.

DISTRIBUTED POWER

We are expanding use of distributed power, a technique that involves placing locomotives at intermediate points on a train to distribute pulling power. The lead locomotive is outfitted with

equipment to remotely control the other locomotives. We use the technique primarily on heavy unit trains, such as coal and crude-oil trains, to reduce train drag and lateral wheel-to-rail forces. The technique allows us to run longer trains and maximize fuel efficiency.

By the end of 2012, 460 locomotives were equipped with distributive power capability, a 12 percent increase over 2011.

IMPROVED TRAIN MOVEMENT

MOVEMENT PLANNER IMPROVES NETWORK EFFICIENCIES

In June of 2010, Norfolk Southern and GE Transportation announced a breakthrough technology called Movement Planner (MP), a software system designed to improve the flow of trains across a railroad's network. We had worked with industry partner GE since the early 2000s to evaluate the software before successfully implementing it on a 200-mile section of our track in Georgia.

Since then, we have continued tweaking the software to match the complexities of our traffic control infrastructure as we integrated MP on some of our most heavily traveled lines. In early 2012, we began ramping up use on three of our 11 divisions. It is living up to expectations.

A third-party study of MP's effect on train traffic on our Georgia Division showed improvements in train velocity and on-time performance in 2012 compared with 2011. While we moved similar volumes of freight over the lines analyzed, the average train speed on the division in 2012 improved by about 7 percent, or nearly 2 mph; average on-time performance improved for all trains, with merchandise trains seeing gains of nearly an hour.

"This is not just a couple of trains performing well—this is the majority of our trains performing better," said Andy Siesenop, our system manager of transportation.

We are the first U.S. railroad to implement MP, which has the capability to create a single plan for train movements across our network. The system can see eight hours in advance and sort through thousands of pieces of data, including hundreds of daily train schedules. MP can determine the most efficient train movements, minimize delays, and help us meet customer expectations for consistent, on-time delivery.

In addition to improved customer service, MP has the potential to save us hundreds of millions of dollars every year in operating costs. By improving network velocity, we need fewer locomotives and railcars to move the same volume of freight. We also get extra rail capacity, meaning we can grow business without having to build new tracks.

LESS FUEL BURN, FEWER EMISSIONS

The potential environmental benefits of Movement Planner are significant. Fuel savings, which translate into reduced carbon emissions, can be achieved by eliminating unnecessary train idling caused by congestion and delays.

Eventually, we plan to link MP with the train-handling LEADER technology to maximize fuel economy. With LEADER and MP working in tandem, we expect to see measurable additional fuel savings and reduced emissions.

NEW LOCOMOTIVES

We purchased 60 new fuel-efficient alternating current locomotives in 2012. The AC units power electric traction motors using alternating rather than direct current and provide superior tractive effort for heavy-haul trains. We have been using AC units in our unit bulk trains, including our coal, grain, and crude oil business. At low speeds, two AC locomotives can perform the work of three DC

units, significantly improving locomotive productivity and delivering the economic and environmental benefits associated with reducing the number of diesel engines used in operations.

CLEANER LIFTS

To reduce environmental impacts of our intermodal yards, we have a capital plan to replace container- and trailer-lift equipment with new machines that have cleaner-burning engines.

Our Locomotive Rebuild Projects: The Ultimate in Recycling

Our locomotive rebuild program adds years of locomotive life, improves fuel efficiency, and produces environmental benefits.

"This is recycling at its finest." That's the way Don Faulkner, general superintendent of Norfolk Southern's Juniata Locomotive Shop, describes our locomotive rebuild program. Through this innovative program, Juniata, and now our Roanoke Locomotive Shop, are transforming 1970s- and 1980s-era locomotives into custom-built, like-new yard, local, and road units.

Currently, we have a half dozen major rebuild projects underway, using locomotives that otherwise might have been sold for scrap. We are reusing their steel platforms, wheel assemblies, traction motor frames, and engine blocks. Then we equip them with upgraded, reconditioned engines to improve fuel efficiency and reduce emissions, including particulate matter and nitrogen oxides.

The end result is generating economic, environmental, and social benefits. The cost of rebuilding is about half as much as buying a new locomotive. An added benefit is that we are reducing carbon emissions associated with the manufacturing of steel and other components for a new locomotive. Urban communities that we serve, particularly regions that face challenges attaining federal air-quality standards, have the potential to benefit from reduced emissions at our yard operations. We'll benefit from the improved fuel economy by spending less on diesel fuel.

Here's a thumbnail look at the primary rebuild programs:

SD60E: These 4000-horsepower road locomotives are rebuilds of 1980s-era SD60 units manufactured by Electro-Motive Diesel Inc. The E stands for "enhanced." The three biggest enhancements are electronic fuel-injection, a motor-driven air compressor, and a dual-circuit engine-cooling system. Juniata employees designed the cooling system, which was unique to the degree that we applied for a design patent. We completed the first SD60E in 2010 and plan to produce around 240 over the next decade, with anticipated savings of \$275 million vs. the cost of buying new. The upgraded engines are about 7 percent more fuel efficient than the original SD60 engines, which translates into diesel-fuel savings of 15,000 to 20,000 gallons a year. In particular, we have been using the SD60E units to move double-stack intermodal trains over our major intermodal corridors.

SD40E: These 3000-horsepower units are used in yard and local service and also as "helper" engines in mountainous terrain. They are rebuilds of 1980s-era EMD SD50 six-axle units. While the SD50 units were regarded as problem engines, the rebuilt SD40Es, equipped with new microprocessor control systems and upgraded engines, are reliable workhorses and burn less fuel with their reduced horsepower engines.

GP40-2 MOTHER/SLUG SETS: These combo units are rebuilds of EMD GP38 locomotives dating to the 1970s and 1980s. The "slug" units, which do not have engines, are equipped with traction motors for propulsion. The slugs are paired with the four-axle GP40-2 "mother" units, which are outfitted with reconditioned 3000-horsepower engines that provide electrical power for the traction

motors. Coupled together, a GP40-2 and a companion slug can perform the work of two 2000-horsepower GP38-2 locomotives, while consuming 40 to 45 percent less fuel.

GP59E MOTHER UNITS: This rebuild of 1980s-era EMD GP59 units is an outgrowth of our successful GP40-2 program. It features a new microprocessor control system combined with a low-emissions engine that is more fuel-efficient and generates more pulling power than the earlier GP40-2 units. These units are intended for yard and local work.

MP21E: This is a rebuild of 1970s- and 1980s-era EMD MP 15 units used to switch railcars in yard operations. Work is underway to upgrade these engines to an electronic fuel-injection system that will increase fuel efficiency and reduce emissions.

DASH 8.5: This program is the first to feature an older GE locomotive, in this case the 1980s-era Dash 8 models. Our Roanoke Locomotive Shop is expected to roll out the first of these rebuilt road units in 2013. The 4000-horsepower Dash 8.5 locomotive is being outfitted with home-grown upgrades similar to our SD60E units. We're also adding a wider-body cab to improve the working environment for train crews and equipping the engines with an AC-power feature that will transform them into mobile standby generators for rail terminals in the Southeast that lose power in hurricanes.

NEW EMISSIONS-TESTING FACILITY BOOSTS SUSTAINABILITY EFFORTS

In 2012, Norfolk Southern began using an indoor emissions-testing facility that we constructed at the Juniata Locomotive Shop.

The two-story, climate-controlled facility has become an integral part of our locomotive rebuild program. It gives us a quick, cost-effective way to test and fine-tune engines as we're designing and developing them.

"We're using it almost every day," said Don Faulkner, general superintendent of Juniata. "We're tweaking and fine-tuning the engines to get the maximum performance with the least amount of fuel."

We also are using the facility to help us design emissions kits for locomotives in the rebuild program. In May 2013, the Environmental Protection Agency approved our application for a certificate of conformity that will allow us to build and install engine emissions kits for rebuilt SD60E units. Having the EPA certificate means we can meet federal emissions standards by using less expensive, reconditioned after-market engine parts for our own emissions kits rather than buying kits from the manufacturer.

In addition to saving money, the emissions testing facility allows us to test a variety of prototype engine designs and have more control over how an engine performs. That's important, because tuning an engine is a balancing act between emissions reduction and fuel efficiency—gaining in one area typically means giving up in the other. With the SD60E certificate, we have designed a kit to achieve the best fuel economy we can, while meeting or exceeding applicable EPA standards. Even an extra 1 to 3 percent gain in fuel economy would be significant in terms of cost savings.

Our investment in the testing facility, one of only a handful like it in the U.S., is an example of how we like to achieve sustainability: reducing environmental impacts while also lowering operating costs. Being able to develop less expensive alternatives could enable us to more quickly adopt solutions to improve fuel efficiency and reduce emissions across our entire locomotive fleet. That's good for us and for everybody else.

LOCOMOTIVE SHOP ACHIEVES GREEN RECOGNITION BY RECYCLING

Our shops and facilities are taking the initiative to reduce their environmental impact, and Juniata Locomotive Shop is helping lead the way. The 70-acre facility, including 30 acres under roof, is the largest locomotive repair facility in North America.

For 2012, the shop earned a certificate of environmental achievement from the Safety-Kleen “Make Green Work” program by participating in the company’s closed-loop recycling program for used oil and cleaning solvents. Juniata avoided 1,158 metric tons of greenhouse gas emissions through its recycling efforts.

Based on the U.S. Environmental Protection Agency’s calculator of carbon dioxide equivalents, the emissions avoided were equal to the consumption of 129,876 gallons of gasoline, and represent the amount of carbon absorbed by 30,020 trees grown for 10 years in an urban environment.

During the past three years of participating in Make Green Work, the shop has avoided 3,522 metric tons of carbon dioxide-equivalent emissions.

Alternative Power Projects

To help the nation meet its energy and transportation goals, Norfolk Southern is committed to pursuing alternatives to our traditional diesel-burning locomotive fleet.

Employees in our research and tests group in Roanoke, Va., have been exploring a wide range of alternative fuels, from soybean-based biodiesel and electric engines to hydrogen fuel cells and high-powered engines fueled by ethanol. We approach these efforts knowing that some alternatives may never be practical for the commercial market. However, research and innovation can produce breakthroughs that will revolutionize the way the rail industry does business.

That's why we keep trying. It is part and parcel of our pledge to be a sustainable corporation.

Here's a look at some of our major projects involving alternative energy or nontraditional locomotives:

NS 999 LEADS THE CHARGE

Norfolk Southern began developing a battery-powered locomotive in 2007, part of a larger initiative to explore alternative-powered engines to save on fuel costs, lower emissions, and reduce reliance on foreign oil sources.

Generating the amount of battery power needed to run a locomotive is much more challenging than that needed to run an automobile, and current battery technologies pose limitations for rail-industry applications. Essentially, we are pioneering the field of battery-powered locomotives.

In fall 2009, working with industry partners and scientists at Penn State University, we unveiled NS 999, a prototype electric four-axle switcher locomotive. The eco-friendly unit, built on a reused 1969 EMD GP38 body, was powered by a bank of 1,080 lead-acid batteries and equipped with a unique regenerative braking system designed to recharge the batteries during operation.

Since then, we have reworked the battery management system to address technical challenges that arose during trial field operations. In 2013, we plan to roll out the next generation NS 999, outfitted with a bank of more technologically advanced hybrid lead-carbon batteries developed by industry partner Axion Power International.

In addition to NS 999, we are continuing work on a prototype battery-powered road locomotive that would move freight over long distances.

We are optimistic that our latest efforts will provide a foundation for development of affordable battery-powered locomotives.

"We're really excited about it," said Gibson Barbee, our senior engineer of energy, who has been involved with NS 999 from the start. "It's all about perseverance, to continue working and moving forward."

EN6

Initiatives to provide energy-efficient or renewable energy based on products and services, and reductions in energy requirements as a result of these initiatives.

CLEANER, MORE EFFICIENT ROAD LOCOMOTIVE

We have worked with industry partners, Progress Rail Services and Caterpillar, since 2008 to help develop the PR43C, a six-axle 4300-horsepower road locomotive equipped with a unique dual diesel-engine system. To achieve maximum fuel efficiency and lower emissions, the locomotive relies on a 700-horsepower engine to operate at lower throttle notches and while idling. When the need for power increases, a larger, C-136 advanced technology, 3600-horsepower engine begins running. Together, the engines can generate the full 4300 horsepower.

We are operating 10 of the PR43C units. Six feature an innovative power-sharing system designed to further optimize fuel efficiency by allowing them to start and stop the engines of companion locomotives as needed while pulling a train.

Another environmental benefit of the PR43C program is that Progress Rail is reusing older SD50 and SD60 locomotive frames, saving on energy and manufacturing costs of building new while extending the useful life of a railroad workhorse.

SYNTHETIC BIODIESEL SHOWS PROMISE

In 2012, Norfolk Southern became the first U.S. railroad to begin using a 100 percent biodiesel fuel made from waste animal fats and grease. We used the synthetic diesel to fuel locomotives at our rail terminal in Meridian, Miss., which is near the Geismar, La., plant that produced the alternative diesel.

The pure biodiesel—made by Dynamic Fuels, LLC, a 50/50 joint venture owned by Tyson Foods, Inc. and Syntroleum Corporation—is fully compatible with our diesel-electric locomotives and did not require engine modifications. Based on lab tests, synthetic diesel in our locomotives emits less nitrous oxide, carbon dioxide, and particulate matter than petroleum diesel.

In addition to environmental benefits, use of the home-grown fuel supports growth of the U.S. economy and its manufacturing base.

“We took a byproduct that previously was a waste and turned it into an alternative fuel source useful to everyone,” said Ken Jensen, our director of purchasing. “This helped us to diversify our fuel supplier base in an economically and environmentally viable way.”

USING BIOFUELS IN ILLINOIS

Since 2010, we have partnered with locomotive maker Electro-Motive Diesel to test blends of a fuel additive made from another home-grown and renewable energy source—vegetable-based biodiesel.

After extensive testing, we began fueling locomotives in Chicago and Decatur, Ill., with an approximately 10 percent biodiesel blend. We’re now using 1 million to 1.5 million gallons of the biodiesel blend every month to run locomotives in the state. A state tax credit that eliminates payment of Illinois’ 6.25 percent fuel tax on certain biofuel blends and a federal tax credit have offset the higher production costs associated with biodiesel.

Energy Efficiency

Gains in energy efficiency

In 2012, energy consumption—including lighting, heating, and cooling—was our second largest source of greenhouse gas emissions. To lower these emissions, we have developed an aggressive strategy to improve energy efficiencies of our office buildings and rail yard facilities. That includes energy conservation practices.

Over the past six years, we have installed more energy-efficient and employee-friendly lighting and fixtures in offices, shops, and rail yards. Two years ago, we started a program to replace aging and improperly sized heating and air-conditioning systems in field facilities.

We are seeing successes. As noted elsewhere in this report, in 2012 we reduced our Scope 2 emissions related to our electricity by more than 3 percent. Two of our primary office buildings—our Norfolk headquarters and our Roanoke office—have earned the Environmental Protection Agency's ENERGY STAR® rating within the past three years, putting them in the top 25 percent of similar buildings nationwide in terms of energy use and emissions.

The bottom line: Our efforts to be more sustainable have saved on energy bills, improved the work environment for employees, and reduced our environmental footprint in the communities we serve.



Andy Paul, Energy Services Manager, Norfolk Southern

ANDY PAUL: SAVING ENERGY, WITH ENTHUSIASM

With more than 24,000 utility bills every month, managing energy use at the many offices, shops, and field facilities across our 22-state territory is a challenge.

That task falls to Andrew Paul, our energy services manager. Paul joined Norfolk Southern in 2012 after a 30-year career in the Navy. The Naval Academy graduate served on destroyers as a surface warfare officer, retiring in 2010 as a captain. He holds a degree in naval architecture and is a qualified steam- and gas-turbine engineer.

Paul's job at the railroad is to manage energy in all its forms, including electricity usage as well as natural gas, propane, water, sewer, and solid waste management. His energy services

group ensures that utility bills are paid, looks for ways to reduce the company's energy consumption, contracts for the cheapest possible energy, and serves as advocate and in-house consultant on projects to save on energy costs.

His view is that energy usage and sustainability are intertwined at Norfolk Southern.

"If you save a kilowatt hour of energy, you're saving carbon," he said. "So we're looking to save energy, save money, and reduce carbon emissions."

Paul is busy with various energy-saving initiatives. To get a better handle on energy consumption, he is overseeing a project to analyze energy use at facilities with the highest power bills. A pilot planned at our Norfolk, Va., coal transload facility involves installing electricity submeters to itemize power

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

EN3

EN4

EN5

EN7

Our Norfolk headquarters and our Roanoke office have earned the Environmental Protection Agency's ENERGY STAR® rating within the past three years

usage by enduser. Currently, Paul receives one large bill for the facility, without a breakdown as to which parts of the operation consume the most electricity.

"We can make all kinds of decisions by doing this," Paul said. "You can't manage what you don't measure, and if you don't have any clues as to where and when you're spending for electricity, you just pay the bill."

Another initiative is to install online utility-manager software so that site managers, such as terminal superintendents, will be able to compare electricity use at their facilities over periods of time—something that's not easy for them to do now.

"I want to give them tools to use to monitor their usage, so that I have an array of energy managers out there," Paul said.

Paul said he is impressed with the railroad's support of innovation and technology to increase efficiencies, both for the bottom line and to reduce our environmental footprint. It's a philosophy he enthusiastically embraces.

"We truly do want to work with sustainability and do what's right to improve our corporate responsibility," Paul said. "We're looking at solar power projects, geothermal, all emergent sustainable technologies. We're not dismissing any of them."

A TRIPLE PLAY FOR OUR LIGHTING UPGRADE: IT SAVES ENERGY, COSTS, AND EMISSIONS

Six years ago, we launched a program to outfit 600 offices, shops, rail yards, and facilities in 300 locations with longer-lasting, more energy-efficient lighting.

In 2012, we completed six major projects at rail yard facilities in West Virginia, Pennsylvania, and North Carolina that have improved nighttime visibility for yard personnel and generated significant energy and cost savings.

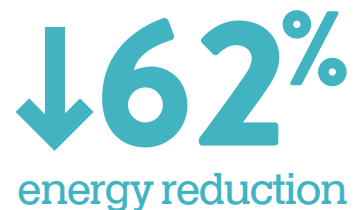
Altogether, the projects—an \$856,000 capital investment—have cut energy use by an estimated 62 percent. That represents a reduction of more than 3.5 million kilowatts, saving the company more than \$288,300 in annual electricity costs. There's also an environmental benefit, reducing carbon emissions by an estimated 2,536 metric tons.

The cost savings are substantial enough that one of the yard upgrades is expected to pay for itself in six months. Overall, the average payback will occur in less than three years.

Through 2012, we have installed nearly 91,000 of the more technologically advanced light bulbs and fixtures since we began the replacement program.

We estimate that the lighting upgrade systemwide has lowered system energy consumption by more than 53 million kilowatt hours annually, cutting carbon dioxide emissions by more than 37,000 metric tons—the equivalent of removing nearly 7,800 cars from the highway.

It's good for employees, too. The ceramic metal halide bulbs we have installed in outdoor facilities emit clean, full spectrum light that enhances safety and security and is easier on the eyes than the yellowish light of the high-pressure sodium bulbs they replaced.



↓62%
energy reduction

Estimated energy savings
from six lighting projects
in 2012

ENERGY STARS

Both our 21-story headquarters tower in downtown Norfolk, Va., and our 11-story office building in Roanoke, Va., have achieved the U.S. Environmental Protection Agency's ENERGY STAR® rating as a result of our lighting and energy initiatives. The Norfolk building earned the rating in 2010, while our Roanoke building got the rating in early 2013. Commercial buildings with the rating perform in the top 25 percent of similar facilities nationwide for energy efficiency, typically reducing annual energy use and carbon emissions by about 35 percent each.

HVAC REPLACEMENT PROGRAM: GOOD FOR BUSINESS AND ENVIRONMENT

Two years ago, we launched a capital project to replace aging heating and cooling systems at many of our smaller office facilities and operating locations.

In 2012, we invested more than \$600,000 on 38 projects to install high-efficiency heating and cooling systems to replace HVAC units that were at least 15 years old or improperly sized for the facility.

We calculate that the new units reduce energy use at those facilities by 43 percent, translating into cost savings of about \$15,000. A practical benefit is gained by replacing aging units before they fail and cause outages. In addition, there is an environmental payoff, with carbon emissions reduced by an estimated 105 metric tons.

The new units exceed the minimum federal Seasonal Energy Efficiency Rating, or SEER, a measure of energy efficiency. Choosing higher-efficiency units over standard HVAC equipment adds to upfront costs, but the annual energy savings they generate allows us to recover the extra spend within about three years.

In the first two years of the program, we invested more than \$1.1 million on 78 HVAC replacement projects.

A BIG PAYOFF ON A SMALL INVESTMENT

In 2012, our energy services group analyzed the energy expense at our 11-story office building in Roanoke, Va., installing submeters to track power use at specific times of day and night.

The results were revealing. Typically, the energy used to heat and cool office buildings declines significantly after employees go home for the day. At Roanoke, energy consumption remained constant day and night.

It didn't take long to figure out why. While most of the office employees worked a day-time shift, our coal group employees on the 10th floor were there 24/7 to accommodate customers. The building's HVAC system was heating and cooling the entire building just to accommodate a single floor.

Our solution was simple and relatively inexpensive: We invested \$10,000 to install a separate HVAC system that heats and cools only the 10th floor. That allows us to shut off the building's main HVAC system overnight.

The payoff: NS is saving more than \$61,000 in annual power bills. In just two months of operation, the 10th-floor HVAC system has paid for itself.



Norfolk Southern headquarters
Norfolk, Va.

ENERGY CONSUMPTION

	2009	2010	2011	2012
GALLONS OF DIESEL FUEL (MILLION)	397.3	440.1	476.6	459.3
GALLONS OF GASOLINE (MILLION)	11.4	11.7	10.2	9.2
GALLONS OF PROPANE AND HEATING OIL (MILLION)	2.0	2.7	2.8	1.6
KILOWATT-HOURS OF ELECTRICITY (MILLION)	468.8	440.7	451.5	437.1
CUBIC FEET OF NATURAL GAS (MILLION)	622.9	372.4	563.6	633.2

ENERGY EFFICIENCY

	2009	2010	2011	2012
REVENUE TON-MILES PER GALLON DIESEL FUEL	404	413	407	407
DIESEL FUEL PER MILLION DOLLARS OF REVENUE (GALLONS)	49,860	46,253	42,200	41,345
GASOLINE PER MILLION DOLLARS OF REVENUE (GALLONS)	1,430	1,235	915	834
PROPANE & HEATING OIL PER MILLION DOLLARS OF REVENUE (GALLONS)	248	288	253	150
ELECTRICITY PER MILLION DOLLARS OF REVENUE (KWH)	58,826	46,319	40,410	39,596
NATURAL GAS PER MILLION DOLLARS OF REVENUE (CUBIC FT.)	78,173	39,141	50,448	57,352
FUEL OIL AND NON-LOCOMOTIVE DIESEL PER MILLION DOLLARS OF REVENUE (GALLONS)	2,926	1,330	916	785

2012 ENERGY CONSUMPTION BY PRIMARY ENERGY SOURCE		
SOURCE	CONSUMPTION (Megajoules - MJ)	
BIODIESEL	660,457,454	660,457,454 MJ TOTAL DIRECT ENERGY CONSUMPTION FROM RENEWABLE ENERGY SOURCES
COAL	382,808,153	70,705,225,849 MJ TOTAL DIRECT ENERGY CONSUMPTION FROM NONRENEWABLE SOURCES
DIESEL	67,500,879,166	
FUEL OIL	697,520,287	
KEROSENE	35,376,374	
GASOLINE	1,212,548,806	
JET FUEL	46,621,692	
NATURAL GAS	688,379,162	
PROPANE	141,092,209	
ELECTRICITY	1,573,725,820	1,573,725,820 MJ TOTAL INDIRECT ENERGY CONSUMPTION
TOTAL 72,939,409,123 MJ TOTAL ENERGY CONSUMPTION FROM ALL SOURCES		

IN THIS SECTION

LEED AND LOW-EMISSIONS CRANES

LEED & Low Emissions Cranes

Corridor terminals highlight rail's environmental advantage

To underscore rail as the most environmentally responsible way to move freight over land, Norfolk Southern went an extra mile on new intermodal terminal buildings on our Crescent Corridor.

We adopted LEED (Leadership in Energy and Environmental Design) Certification standards to construct administrative office buildings at the facilities to reduce their environmental footprint. We have built LEED-designed offices at new regional intermodal facilities at Rossville, Tenn., McCalla, Ala., and Greencastle, Penn., and we are constructing a fourth in Charlotte, N.C. The green touches will reduce energy and water use.

Following LEED best practices, we used "low-impact" construction materials such as light-colored metal "cool" roofs that reflect heat, low-flow plumbing fixtures, and high-efficiency heating and cooling units. The LEED features make the buildings look different from a typical rail facility office, such as the way windows are arranged to make better use of sunlight, and the use of extended roof overhangs that act as sun shades to reduce air-conditioning use. Bike racks were installed for employees inclined to pedal to work.

Adhering to LEED standards increased each building's costs by about 15 percent. Eventually, we should recoup those extra costs as a result of savings we achieve from reduced energy and water use, said Ken Hearn, manager of architectural services. "We want to be a responsible corporate citizen," he said, "and this is a way we can minimize the impact we make on the environment in a cost-effective way."

HYBRID CRANES SAVE FUEL, REDUCE EMISSIONS

In addition to its green LEED design, the Birmingham Regional Intermodal Terminal at McCalla, Ala., is our first intermodal facility to use a new type of battery-powered hybrid crane intended to save fuel and reduce environmental impacts of operations.

We purchased two of the hybrid rubber tire gantry cranes, known as RTGs, which are used to lift intermodal containers on and off rail cars. The hybrid cranes are powered by a bank of 108 batteries and are designed for continuous operation. During use, a low-horsepower diesel engine charges the batteries.

We've been pleased with the results. Standard diesel RTG cranes we use consume 6 to 7 gallons of diesel per operating hour, compared with about 2 gallons an hour for the hybrid cranes. That reduces fuel costs and emissions.

Our plan is to evaluate the performance of the two hybrid cranes over time and decide later whether to purchase more, based in part on return on investment. A consideration is that the hybrids are about 45 percent more expensive than standard diesel cranes.

In addition to the low-emission hybrids, we purchased seven fuel-efficient RTG cranes in 2012 for use at other new Crescent Corridor terminals. Those cranes are outfitted with a power-on-demand feature that saves fuel by producing just enough horsepower needed to perform specific functions. On average, that saves about 2 gallons of fuel per operating hour for each crane.

As we pursue greener technology across our operations, the experiment with hybrid cranes and our purchase of the new fuel-efficient cranes are examples of how the strategy is being put into place.

Carbon Mitigation Through Conservation

Our work to capture emissions the natural way

On the operations side of business, Norfolk Southern works to reduce our carbon footprint by improving fuel and energy efficiencies of our two largest emissions sources—locomotives and railroad facilities. As a corporate citizen, however, we have adopted a broader strategy that has us joining with public and private partners to help reduce the planet's carbon footprint. That's what our signature Trees and Trains program is all about.

Trees and Trains is our model for investing in community conservation initiatives. We announced the initiative in June 2011 when we partnered with GreenTrees®, the nation's leading reforestation program, to help reforest the ecologically important Mississippi Delta. We have also partnered with The Longleaf Alliance and The American Chestnut Foundation to conserve and restore longleaf pines and American chestnuts to their historic ranges.

These tree-planting efforts represent the three primary components of a responsible corporate sustainability program: planet, people, and profits. Over time, the trees will capture and store millions of tons of carbon emissions, which is good for our planet. Residents will benefit from improved air and water quality and recreational opportunities. Our company will benefit because some of these projects—notably, our work with GreenTrees, are expected to generate carbon credits that we can sell to recoup our investment.

As a publicly traded company that aims to create shareholder value, our Trees and Trains program is a socially responsible way to do just that. In short, we have turned a carbon footprint into a corporate opportunity.

While restoring former woodlands, we're generating long-term benefits for multiple stakeholders, including residents of the communities we serve, customers, employees, farmers, and family landowners, as well as Norfolk Southern.

Blair Wimbush, Norfolk Southern vice president of real estate and corporate sustainability officer, on our partnership with GreenTrees.

PROGRESS ON TREES AND TRAINS

We made substantial progress in 2012 on our reforestation program with partner, GreenTrees. Two years after launching the five-year, \$5.6 million effort, we planted 2.4 million trees on 4,000 acres in four states in the Mississippi Alluvial Valley (MAV). That represents 40 percent of our goal to plant 6 million trees on 10,000 acres in the ecologically important valley, a region long served by our railroad.

It will be about two more years before the trees have matured enough to generate carbon credits. GreenTrees is helping us certify the carbon credits through the American Carbon Registry, a nonprofit enterprise that handles over-the-counter transactions in the voluntary U.S. carbon-offset market.

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

EN11

EN15

GreenTrees'® effort to reforest 1 million acres in the Mississippi Alluvial Valley is the leading reforestation program on private lands in the U.S. The MAV, considered North America's "Amazon," is a vital habitat for numerous plant and wildlife species. Forest once covered 25 million acres of the valley, but most of the land was converted to agricultural production, leaving only four million acres of forest today.

CONSERVATION WITH A PURPOSE, CAPITALISM WITH A HEART

A version of the article below, written by Chandler Van Voorhis, GreenTrees co-founder and managing partner, appeared in the Feb. 12, 2012, newsletter of the Council for Corporate Responsibility. It details his views of the benefits of Norfolk Southern's Trees and Trains program.

As the balance of the earth's resources shrink, amid higher human consumption and world population growth, a new perception is taking hold. The frontier of greatest economic opportunity is with those enterprises that:

- Put more into the earth than they take out
- Reduce carbon emissions whose future costs are steep
- Gain shareholder value through sound environmental practice
- Exercise entrepreneurial responsibility to meet resource shortages
- Embrace natural capitalism over industrial capitalism

In June 2011, Norfolk Southern Railway made the largest forestry carbon investment to date in North America. They are planting 6.04 million trees for 1.12 million tons of carbon credits over five years through GreenTrees and C2I, helping to restore the Mississippi Alluvial Valley.

Over 50 years, according to the U.S. Forest Service, planting a single tree generates \$162,000 of ecological value: That's \$31,250 worth of oxygen, \$62,000 worth of air pollution control, \$37,500 worth of water recycling, and \$31,250 worth of soil erosion control.

With its 6 million trees, Norfolk Southern will be creating nearly \$1 trillion of value over 50 years. This value creation and ecological impact reflect the role of carbon as a guarantor of forest permanence, where a tree is worth more up than down.

From a corporate perspective, Norfolk Southern's investment represents 211 trees per employee, 299 trees per track mile, and 1,450 trees per locomotive. Over 50 years, that translates into a value of \$34 million per employee, \$48 million per track mile, and \$235 million per locomotive.

Norfolk Southern thinks long term. Their leadership is prompting other large corporations to reach out to GreenTrees about similar investments.

Trees and Trains is the story of conservation with a purpose, and capitalism with a heart. At the heart of the intersection are industry and the environment working with each other.

"Trees and trains have a lot in common. The essence of a train is the efficient movement of goods across the landscape. Trees represent the most efficient distribution of ecological services and goods. Both are long-term assets that require heavy upfront capital to build. Together, trees and trains symbolize how conservation capitalism and balance are delivered."

Chandler Van Voorhis,
GreenTrees co-founder and
managing partner.

TREES AND TRAINS SPREADS ITS 'ROOTS'

In addition to our project with GreenTrees, we are working on other carbon-mitigation projects that will benefit wildlife, communities, and the environment.

Two projects we are excited about involve longleaf pines and American chestnut trees. Over the decades, land clearing and development or disease reduced the forest stands of both species of trees to a fraction of their former range. Norfolk Southern has partnered with organizations committed to preserving and expanding these valuable trees.

EXTENDING THE REACH OF THE LONGLEAF

Longleaf pines, one of North America's most threatened forest ecosystems, are near and dear to Norfolk Southern. We own and manage a 6,000-acre longleaf pine forest at our Brosnan Forest conference facility near Charleston, S.C. Longleaf pine forests harbor an incredible diversity of plants and animals, providing a unique habitat that endangered red-cockaded woodpeckers need

for survival. Brosnan Forest is home to the largest U.S. population of red-cockaded woodpeckers on private lands.

To help restore this important ecosystem to its Southeastern U.S. range, the Norfolk Southern Foundation, since 2010, has donated or pledged \$100,000 to The Longleaf Alliance. The nonprofit, based in Andalusia, Ala., was formed in 1995 to ensure a sustainable future for the longleaf pine. Among other things, our funding has helped the Longleaf Alliance develop a longleaf growth and yield model and educate landowners and foresters on best practices in managing longleaf pine forests.

CHESTNUT TREES HELP RECOVER COAL MINES

Farther north, Norfolk Southern has partnered with The American Chestnut Foundation (TACF) to restore American chestnut trees to hardwood forests in the Appalachian regions of the eastern U.S. The nonprofit is headquartered in Asheville, N.C.

A special appeal of TACF's work is that much of the effort is focused on reforesting abandoned surface coal mines in communities that we serve. We like the idea of participating in the reforestation of lands that were mined for a natural resource that generated jobs and electricity for millions of residents across our territories.

In 2012, the Norfolk Southern Foundation awarded \$25,000 to TACF, up from \$15,000 in 2011. Working with the Appalachian Regional Reforestation Initiative and other partners, TACF has planted chestnut and mixed hardwood trees on former mining sites in five states across our territory.

A VALUED PARTNERSHIP

The following is a stakeholder statement from Bryan Burhans, president and CEO of The American Chestnut Foundation, a not-for-profit organization whose goal is to restore American chestnut trees to their former Appalachian range to benefit the environment, wildlife, and society.

The American Chestnut Foundation greatly values its partnership with Norfolk Southern. As one of TACF's largest corporate partners, Norfolk Southern is setting an example in corporate responsibility by supporting our efforts to conserve and restore the environment.

Support from Norfolk Southern provides TACF with the critical resources necessary to accomplish the historic restoration project of returning the American chestnut to our eastern forests. The partnership has enabled TACF to reforest formerly unproductive mined lands in Kentucky, Virginia, West Virginia, Pennsylvania, and Tennessee. In 2011 and 2012, TACF worked with the Appalachian Regional Reforestation Initiative and Green Forests Work to help facilitate 56 events to plant 806 acres of land with 455,516 mixed hardwood trees. More than 4,000 community volunteers helped plant trees on each site with a special emphasis on youth involvement. Approximately 5,000 of the hardwoods planted were chestnuts.

Funding from corporations like Norfolk Southern helps us meet our objective to establish diverse forests in Appalachia, including reclaimed mine sites. The Appalachian coal field is in the heart of the American chestnut's native range and is a key region for restoration efforts.

CONSERVATION WITH A DEDICATED PARTNER

The following is a stakeholder statement from Robert Abernethy, president of The Longleaf Alliance, a 501-(c) 3 nonprofit conservation organization dedicated to ensuring a sustainable future for the longleaf pine ecosystem.

For the last five years, The Longleaf Alliance has worked closely with Norfolk Southern to study the longleaf pine ecosystem, educate those who manage and own these forests, and assist in the management of one of the premier examples of a well-managed longleaf forest, Norfolk Southern's own Brosnan Forest.

Quite literally, The Longleaf Alliance could not achieve its conservation goals without the support of dedicated partners, and Norfolk Southern has been and continues to be a great partner.

Norfolk Southern's support has been invaluable in assisting us in our mission to restore longleaf ecosystems across their historic range. In 2010, the Norfolk Southern Foundation awarded the Alliance our first two-year grant for \$50,000 to complete a growth and yield model that will form the basis to calculate the amount of carbon stored by longleaf pine forests. The Alliance acted as a catalyst for the completion of the project through Auburn University.

In 2012, the Foundation provided an additional \$50,000 grant to assist with general operations, including the delivery of Longleaf Academies. These academies are sponsored by state and federal land management agencies and partners across the South, serving to educate landowners, professional foresters, and other natural resource professionals on the ecology and management of the longleaf pine ecosystem.

Because of Norfolk Southern's partnership and support, the Alliance has been able to achieve more conservation and approach its goal of restoring and reforesting enough land to reach 8 million acres of longleaf pine by 2024.

Environmental Management

Strong environmental management

Norfolk Southern has many internal controls and procedures to ensure that we meet or exceed environmental regulations that apply to our company. We comply with an array of federal environmental statutes and programs delegated to state and local governments. Among relevant laws and regulations are the Clean Water Act, the Clean Air Act, the Oil Pollution Control Act, and the Resource Conservation and Recovery Act.

We have developed formal corporate environmental policies and procedures that follow industry best-management practices, and we regularly compare efforts with other Class 1 railroads and FORTUNE 500 companies to ensure our programs are robust and continually improving.

In addition to our environmental staff, we believe every employee has personal responsibility for safety of operations and environmental compliance. While other companies have found that their safety and environmental departments can function outside of their operating departments, we believe that adhering to safety and environmental policies is so important to our success that employees charged with administering and managing these policies must be an integral part of our core operating department. The important synergies created by that philosophy cannot be overstated.

NEW SOFTWARE TO MANAGE ENVIRONMENTAL PERFORMANCE

In the last several years, third-party software systems and applications designed to manage corporate environmental and sustainability programs have matured considerably, offering a broader, more comprehensive way to track activities and trends across operations. Recognizing that, in 2012 we selected a new cloud-based software system to help us improve the way we manage environmental oversight and corporate sustainability.

We began using the system in early 2013 after spending much of 2012 building and integrating the software and its suite of applications into our data-collection systems. A primary benefit is that the new software centralizes collection and reporting of data we use to monitor and manage our environmental programs. Our operations, for example, must comply with more than 150 federal and state permits, each with strict monitoring requirements, and we maintain in excess of 200 environmental protection and pollution-prevention plans. The software will help us track those permits and plans on a daily basis to ensure that we are in compliance and will also allow us to identify trends over time.

In addition, the software will provide a platform for us to more easily measure, manage, and report our carbon footprint and other key environmental data important to the company's sustainability efforts. We plan to use the system to track such things as water and electricity usage and recycling of railroad materials. Ultimately, it will enhance efforts to further integrate sustainability practices into railroad operations, and will improve our transparency in terms of disclosures of our sustainability performance.

IN THIS SECTION

ENVIRONMENTAL COMPLIANCE

ENVIRONMENTAL OPERATIONS GROUPS

EN26

Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.

Environmental Compliance

Investments support performance

Norfolk Southern spends significant funds on environmental capital, remediation, and compliance initiatives. In 2012, the company invested \$6.3 million on environmental capital projects such as wastewater treatment plant upgrades, above-ground storage-tank dike liners, tank-car spill pans, and other improvements to enhance our environmental performance.

In addition, we spent more than \$23.6 million to support environmental compliance initiatives and remediation activities.

To ensure that we meet or exceed wastewater discharge standards applicable to our operations, we continually upgrade and install state-of-the-art wastewater-treatment systems. Systemwide, we have 161 water discharge permits that govern the quality of water discharges and protect the environment. Typical water discharges from our facilities include treated wash water, water from repair and maintenance operations, sanitary water, and storm water.

EN30

Total environmental protection expenditures and investments by type.

Environmental Operations Groups

A dedicated staff is the key to our environmental performance

Norfolk Southern's environmental protection group administers the railroad's environmental management program. The group, part of our Safety and Environmental Department, has subgroups that focus on environmental operations, environmental engineering, remediation, compliance, and hazardous materials.

ENVIRONMENTAL OPERATIONS GROUP: Field personnel in this group are our "boots on the ground" to help implement environmental compliance programs. They provide guidance to operating departments to ensure railroad operations comply with environmental regulations and the company's formal policies. They offer 24/7 emergency preparedness and response to spills and releases and maintain master service agreements with a network of specially trained emergency-response contractors who can quickly respond to emergency situations, such as derailments or natural disasters. This group also manages approximately 80 wastewater treatment facilities across the system, provides field management of solid and hazardous waste programs, and oversees other environmental programs such as asbestos, battery, transformer, and PCB management programs.

ENVIRONMENTAL ENGINEERING: This group manages design and construction of pollution-control equipment to ensure that infrastructure meets or exceeds applicable environmental regulations. It also helps monitor performance of infrastructure, such as wastewater treatment plants and secondary containment structures. The group also advances upgrades or new construction of facilities to ensure regulatory compliance as requirements evolve and become more stringent.

ENVIRONMENTAL REMEDIATION: This group manages environmentally impacted properties. Along with a team of environmental attorneys and accountants, it racks, estimates, discloses, and reports corporate environmental liabilities associated with company holdings in a transparent process. The group ensures that impacted properties are remediated in the most practical, expedient manner, coordinating most projects with state regulatory agencies under voluntary programs.

ENVIRONMENTAL COMPLIANCE: This group monitors and manages compliance with various air and water permits and plans; works with line management to enhance awareness and assure ongoing compliance; conducts regular environmental audits of operating facilities and other properties; and designs, develops, and distributes environmental awareness and employee training programs.

HAZARDOUS MATERIALS: This group manages risks associated with rail transport of hazardous materials. It provides emergency preparedness and response capabilities with specialized expertise in managing emergency situations involving hazardous materials. The group ensures that the railway complies with Federal Railroad Administration and U.S. Department of Transportation regulations, including designing and administering training programs for employees, industry, and first responders. It also prepares security and High Threat Urban Area plans, audits customer facilities that pose potential safety risks to the railroad, and trains approximately 5,000 emergency responders every year in the communities we serve to enhance emergency preparedness capabilities across the system.

EN28

Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.

Clean bill on 2012 inspections

Norfolk Southern routinely audits operations to ensure we comply with environmental laws and regulations. In addition, we are inspected on an ongoing basis by regulatory agencies and, on occasion, exceptions are taken which can potentially result in fines. In 2012, 41 inspections were conducted at NS facilities by environmental regulatory agencies and none of those inspections resulted in the issuance of fines or penalties.

Waste

Norfolk Southern has recycled many industrial process railroad materials for years, such as track crossties, waste oil, and scrap metals. Now, we are focusing efforts on rail yard operations to get more of the smaller, “every day” items tossed into recycling bins instead of being hauled away to landfills.

LANDFILL DIVERSION AND “RIGHT SIZING” ARE THE FOCUS OF WASTE INITIATIVE

To reduce costs and improve the way we manage waste at our yards and terminals, we have begun waste-stream audits of facilities systemwide. The aim is to introduce single-stream recycling at facilities to ensure that items such as plastic and glass bottles, cardboard, and paper do not end up in landfills.

All of the recyclables would be transported to recycling facilities, where they would be sorted for use in various recycled products. Because our waste disposal costs are based on tonnage transported to landfills, we can save money by keeping recyclables out of trash bins.

Single-stream recycling is the use of a single bin to collect all items that are recyclable, rather than using separate bins for each type of item. That makes it easier on employees to recycle, a key to successful recycling programs.

The audit will also evaluate the size and number of trash containers at yard facilities and the number of times those containers are emptied. The purpose is to lower our operating costs by “right sizing” the waste collection process, using smaller trash containers, and having fewer trash pickups where appropriate, combined with improved access to recycling containers.

IN THIS SECTION

RECYCLING RAILROAD MATERIALS

EMPLOYEE RECYCLING INITIATIVES

HAZARDOUS WASTE MANAGEMENT

Recycling Railroad Materials

Norfolk Southern has an extensive program to recycle and reuse industrial railroad materials. It keeps thousands of tons of crossties, scrap metal, and steel out of landfills and helps conserve resources through their reuse.

Locomotive shops and large fueling facilities across our system recovered 1.37 million gallons of used oil for recycling in 2012. That compares with 1.85 million gallons in 2011 and 1.26 million gallons in 2010.

We’ve made steady progress incorporating recycled materials into our office operations. In 2012, 23 percent of the money spent systemwide on paper, packaging, and office supplies was for products made from recycled or recovered materials. That was up from 21 percent in 2011 and more than double the 11 percent spent in 2008.

MATERIALS RECYCLED				
	2009	2010	2011	2012
CROSSTIES USED FOR ENERGY RECOVERY (MILLION)	1.8	2.25	2.43	2.84
CROSSTIES SOLD FOR LANDSCAPING	563,000	626,000	510,000	544,146
CROSSTIES REUSED INTERNALLY	301,000	343,000	409,500	374,064
METAL RECYCLED (TONS)	92,590	94,469	92,857*	126,283
SCRAP STEEL RECYCLED (TONS)	210,069	183,665	162,609	200,128
POUNDS OF BATTERIES RECYCLED (MILLION)	1.06	1.02	1.41	1.2

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:



NS RECYCLING EFFORTS KEPT MATERIALS OUT OF LANDFILLS

	2009	2010	2011	2012
POUNDS OF LEAD RECYCLED	709,592	623,639	845,990	793,044
POUNDS OF CADMIUM RECYCLED	21,447	31,946	31,761	28,898
POUNDS OF NICKEL RECYCLED	24,762	25,034	32,085	28,644

MATERIAL PURCHASES

	2009	2010	2011	2012
CROSSTIES REPLACED (MILLION)	3.1	2.9	2.8	2.67
SWITCH TIES AND BRIDGE TIES REPLACED	112,411	109,530	135,495	131,232
RAIL REPLACED (MILES)	455	401	404	466
TONS OF BALLAST REPLACED (MILLION)	3.1	2.3	3	3.35

Employee Recycling Initiatives

Our employees practice sustainability

At Norfolk Southern, fuel efficiency and conservation are not limited to our trains. Our employees also strive to practice sustainability in their professional and personal lives.

About 20 employees at our Roanoke office building are conserving fuel and enhancing their physical fitness by regularly riding their bicycles to work. In response, the company installed a bike rack last year, as well as showers and a locker room for bicycle commuters and those who exercise during lunch. The company earned an honorable mention from the League of American Bicyclists as a bicycle-friendly business.

Norfolk Southern also participates in Roanoke's Clean Commute Challenge and Ride Solutions programs, which encourage motorists to carpool, walk or bike.

"We're letting our employees know about sustainability options to promote professional and personal ways to have environmentally friendly habits," said Jamie Helmer, manager of process improvement and chair of Roanoke SustaiNS. The group was formed in 2008 to support Norfolk Southern's efforts to reduce our environmental impact.

In 2012, Roanoke SustaiNS collected rechargeable batteries at the Roanoke office building, encouraged coworkers to buy produce from local farmers, and gave employees ice cream made in a hand-cranked machine.

Roanoke's conservation efforts are just one example of sustainability practices employees have implemented throughout the Norfolk Southern network. Recycling efforts on the Piedmont Division, for example, have reduced the need for Waste Management services from four times weekly to twice a week, resulting in cost and environmental savings.

At our Chattanooga Terminal, employees in the diesel shop recycle not only used locomotive engine oil but used batteries and toner cartridges. David Johnston, a trainmaster at the terminal, began recycling cardboard and paper there 25 years ago. "I was recycling when recycling wasn't cool," he said. "I hate to see something being wasted."

Today, recycling containers for paper and aluminum cans are placed throughout the terminal. "It reduces the refuse in garbage cans, and there's less paper to pick up when we police the yard," Johnston added.

'BOTTLE LOTTO' PAYS OFF FOR RAIL YARD

Water Bottle Lotto was an instant success when it was launched in 2009 at our John C. Sevier Yard outside Knoxville, Tenn. The clever initiative, the brainchild of locomotive engineer David Cass, encouraged employees to recycle plastic water bottles by awarding prizes through a lottery system for bottles they initialed and placed in recycling containers. It proved so popular that yards across our network adopted the concept to encourage recycling.

Three years later, at Sevier Yard, the Bottle Lotto is no more—there is now no need for it. Once the yard was cleared of bottles and other litter, employees decided they wanted it to remain that way, even without the potential to win prizes.

“Crew members decided they wanted to have a neat place to work whether anybody was watching us or not,” Cass said. “We’re making John Sevier a better workplace. There are some pristine places in the yard now where it’s just gravel, crossties, and track.”

Hazardous Waste Management

Careful management of hazardous wastes

In 2012, Norfolk Southern had four locations considered large-quantity generators of hazardous waste—that is, facilities that generate 1,000 kilograms (2,200 pounds) or more of such wastes in any given month. Two were one-time generating locations, resulting from a bridge abatement project in Somerset, Ky., and a site cleanup in Knoxville. Two were related to work painting locomotives at large locomotive shops: Juniata shop at Altoona, Pa., and the Moore shop at Chattanooga, Tenn.

The waste type, quantities, and disposal method are shown below:

JUNIATA:

- 38,044 pounds of spent paint and solvent, handled by fuel blending and off-site fuel recovery
- 1,320 pounds of spent immersion cleaner, recycled for reuse
- 300 pounds of liquid alkaline, recycled for reuse

MOORE:

- 18,040 pounds of spent paint and solvent, used in fuel recovery
- 1,474 pounds of spent laboratory solvent, used in fuel recovery

SOMERSET:

- 24.1 tons of grit blast waste, disposed of in hazardous waste landfill

KNOXVILLE:

- 343 tons of tetrachlorethylene-impacted soil, disposed of in a landfill

EN24

Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.

Moving Beyond Carbon

Norfolk Southern looks for meaningful ways to partner with local governments and community groups to conserve natural resources, reflecting our desire to be a good corporate neighbor. The railroad's efforts in our own backyard, not far from our downtown headquarters in Norfolk, Va., are an example.

HELPING TO RESTORE A RIVER'S HEALTH

Employees in our headquarters building in Norfolk have a sweeping view of the Elizabeth River as it winds by shipyards, marinas, and office towers. Sparkling in the sun, the waterfront scene is beautiful to behold—but all is not well with the river. Decades of industrial activity along its shores, much of it before businesses began adopting practices to protect the environment, have rendered it one of the most polluted rivers in the Chesapeake Bay watershed.

Just a few miles up the river from our downtown headquarters, our Lamberts Point coal pier loads export coal on ships bound for Europe, South America, and Asia. As a user of the river, we believe our railroad has a corporate responsibility to minimize our impact and do what we can to help restore the river's water quality and ecological health.

We have implemented a stormwater collection system that removes coal particles from runoff and enables us to reuse the water for dust suppression in our operations. In this way, we conserve water and reduce our operating costs.

Through our Thoroughbred Volunteers, an employee at our Lamberts Point 38th Street Car Shop spearheaded a project to raise oysters in waters near the coal pier—part of a community effort to repopulate the river with the bivalves in recognition of the role this species plays in filtering pollutants. For our voluntary efforts to protect and improve the river's water quality, the nonprofit conservation group, Elizabeth River Project, presented us with a Sustained Distinguished Performance River Star award.

In our latest endeavor, we plan to create a "living shoreline" along a quarter-mile stretch at Lamberts Point. Up and down the river, the shoreline has suffered erosion and been overtaken by Phragmites, an invasive reed that chokes out other plant life and provides little value for wildlife. We are working with the city, the National Oceanic and Atmospheric Administration, and the Elizabeth River Project to restore wetlands on our shore property and to encourage growth of native vegetation that will support fish, shorebirds, and other creatures.

This project is an example of how businesses and residents can join forces to benefit communities for generations to come.

Norfolk Southern has been an enthusiastic partner to do what it can to help clean up the river. We appreciate the leadership the company has shown at Lamberts Point. The shoreline there is one of the longest stretches on the main stem of the river, and Norfolk Southern has been great about looking at the best restoration options. It's an excellent project that has lots of opportunities.

Pamela Boatwright, deputy director of administration and manager of the River Stars Program for the Elizabeth River Project.

OUR RESIDENT OYSTER FARMER

As general foreman at Norfolk Southern's 38th Street Car Shop in Norfolk, Bobby Carlow makes sure railcars are properly maintained. As NS' resident oyster farmer, he ensures that baby oysters reach maturity so they can be released into the Elizabeth River as part of a unique oyster restoration program.

Carlow began raising oysters along the shoreline at our Lamberts Point coal transload facility three years ago through a partnership between the railroad and the nonprofit Elizabeth River Project, a group that advocates cleaning up the river's water quality. He was serving on the railroad's Thoroughbred Volunteers Council at the time, and he saw it as a good way to give back to the community. In addition to being tasty, oysters naturally filter and clean the water.

"This is a good area for us to show our commitment to provide a cleaner environment for the region and future generations," Carlow said.

Carlow knows his way around power tools. As a Thoroughbred Volunteer, he has built wheelchair ramps for adults with disabilities, repaired roofs and windows for low-income elderly residents, and cleaned up trash during Clean the Bay day. Raising oysters was totally different.

Working with the Elizabeth River Project and the Virginia Oyster Restoration Center, Carlow wasn't quite sure what to expect. He initially attached mesh bags full of juvenile oysters, known as spat, to a bulkhead at the Lamberts Point docks, near the railroad's export coal pier. "It was hit or miss the first couple of years," he said, noting that storms wreaked havoc on the mollusks.

In October 2012, however, he stuck the latest crop of baby oysters onto half shells and placed them into crab pots that were lowered to the river bottom. "They're doing fantastically," Carlow said. "They're easier to maintain, and I don't have to clean algae off the pots, like I did on the bags."

The project also has become a communal one. Some of the carmen who report to Carlow have taken on responsibility to check on the oysters. "They really like to see their babies grow," he said.

When the oysters reach adulthood, staffers from the Elizabeth River Project and the restoration center transplant them onto artificial reefs in the river to filter sediments and pollutants. An oyster can filter and clean more than 40 gallons of water a day, while the oyster reefs help protect the shoreline and act as home base for dozens of aquatic species.

"The reef is a sanctuary," Carlow said. "They'll keep on growing and helping to clean the river."



Bobby Carlow

Environmental Partnerships

We look for creative ways to partner with communities and government agencies to preserve the environment and reduce our environmental impacts. Our aim is to identify solutions that make good sense economically, socially, and environmentally.

'SURFING' TO A SUSTAINABLE FUTURE

Norfolk Southern's Trees and Trains program is designed as an investment in conservation capitalism and potentially as a means to mitigate carbon emissions. We also have introduced tree planting as a sustainable alternative for environmental remediation projects at historical operating sites.

"Norfolk Southern is looking to be progressive in sustainability applied to site remediation," said Scott Pittenger, an engineer in our environmental remediation group, part of our Safety and Environmental Department. "The approach goes beyond just ecological considerations and works to incorporate societal and economic benefits in the planning and remedy stages of remediation."

Our railroad participates in the Sustainable Remediation Forum, or SURF, a nonprofit corporation initiated in 2006 to advocate for sustainable practices in environmental remediation. SURF membership is comprised of industry leaders and practitioners, including DuPont, BP, and Shell, among others, who work with industry, government agencies, environmental groups, consultants, and academia to promote the benefits of sustainable remediation.

Our remediation projects reclaim sites we owned or leased that have become degraded or adversely impacted by past uses. In the past, remediation often involved use of expensive mechanical systems to pump out polluted groundwater or remove contaminated soils.

Using trees for site remediation is known as phytoremediation. The roots soak up contaminants in the soil and groundwater and break them down into harmless components in the tree tissue. That's good for the environment and also creates social benefits, such as turning former industrial sites into wooded spaces for public recreation and wildlife habitat.

We first tried phytoremediation at a former rail crosstie yard in Oneida, Tenn. About 1,100 hybrid poplars were planted to treat soil and groundwater that had become degraded by creosote used to treat crossties. Testing data collected during the remediation process demonstrated that the trees' root systems were dissipating the contaminants. The Tennessee Department of Environment and Conservation agreed and approved the technology.

We now are working with the Georgia Department of Natural Resources, Environmental Protection Division, on a tree-planting project to reclaim a 52-acre site in Macon, Ga., once leased to a company that used creosote in the manufacture of crossties and telephone poles. Currently, a mechanical system pumps creosote-impacted groundwater through an on-site treatment system to a city-owned treatment facility. This approach is costly, generates carbon emissions, and involves transfer of valuable groundwater resources without beneficial use.

4.13

Memberships in associations and/or national/international advocacy organizations.

In early 2012, we planted a one-acre pilot plot with 300 native sweet gum and maple trees to demonstrate to state environmental officials the effectiveness of a more sustainable approach to meet site restoration goals. The pilot is expected to operate for five years to allow time for the trees to mature and for the collection and evaluation of data.

"We're looking at a system that would let nature take its course," said Pittenger. "It is a sustainable approach that carries benefits for everyone involved."

MODEL PROJECT: A WIN FOR ENVIRONMENT, AN OHIO COMMUNITY, AND THE RAILROAD

In Sharonville, Ohio, we joined a community effort to help turn a once vacant industrial parcel into what some now describe as an urban oasis. Known as the Twin Creek Preserve, this 30-acre wetland and stream-restoration project won the 2012 Ohio Stormwater Association Award for best nonprofit project.

The preserve is north of Norfolk Southern's Sharonville Yard, between our New Castle District line to the west and Cincinnati line to the east. We donated 3.5 acres of marshy land to the Mill Creek Conservancy for the \$2.1 million project; we also donated the cost of flag-protection time to permit work to occur adjacent to train lines near the site. Partners in the effort included the Butler County Water & Sewer Department, Metropolitan Sewer District of Greater Cincinnati, city of Sharonville, OKI Regional Council of Governments, AMEC, General Mills, and Hamilton County Soil & Water Conservation District.

The project's benefits include creation of valuable habitat for a variety of wildlife and recreational space for area residents. Norfolk Southern also benefited, because the project will reduce seasonal flooding that encroached on our tracks and undermined rail infrastructure.

ECONOMIC PERFORMANCE

Norfolk Southern is committed to the delivery of goods in a safe, cost-efficient, and environmentally friendly way.

We work with customers as well as local and state economic development officials to grow business and jobs on our network, and we invest in our rail infrastructure to strengthen the nation's freight transportation network and maintain a competitive edge in the global economy.

As a 186-year-old company, we think in the long term. We rely on innovation and adaptability to adjust to rapidly changing markets in uncertain times. To position our company for the future, we are expanding freight capacity on our primary rail corridors, including our Crescent and Heartland corridors, to better serve our customers and communities and deliver increased value for shareholders.

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Business Profile

Norfolk Southern transports freight that powers the U.S. economy and touches virtually every aspect of daily life in the communities we serve.

PREMIER RAIL FREIGHT TRANSPORTATION

Norfolk Southern Corporation, headquartered in Norfolk, Va., is one of the nation's premier transportation companies. Our Norfolk Southern Railway subsidiary operates approximately 20,000 route miles in 22 states and the District of Columbia, serves every major container port in the eastern United States, and provides efficient connections to other rail carriers. We operate the most extensive intermodal freight network in the East and are a major transporter of coal, automotive, and industrial products.

CONNECTING COMMUNITIES WITH THE WORLD

Our railway transports raw materials, intermediate products, and finished goods primarily in the Southeast, East, and Midwest. Our interchange connections with other rail carriers enable us to move customer goods to and from the rest of the United States. We also transport overseas freight through ports we serve on the Atlantic and Gulf coasts, and provide comprehensive logistics services. The common stock of Norfolk Southern is listed on the New York Stock Exchange under the symbol NSC.

Norfolk Southern was incorporated in Virginia on July 23, 1980. On June 1, 1982, Norfolk Southern acquired control of two major operating railroads, Norfolk and Western Railway Company and Southern Railway Company. While we celebrated our 30th anniversary in 2012, we trace our heritage to the earliest days of U.S. railroading—the South Carolina Canal and Rail Road, chartered in 1827.

Together with our railroad subsidiaries, Norfolk Southern transports freight that is essential to the U.S. economy and contributes to virtually every aspect of daily life. We move such things as vehicles, lumber to build homes, coal for generating electricity and manufacturing steel, canned goods that stock grocery shelves, and a host of other products used every day by households, businesses, and industries.

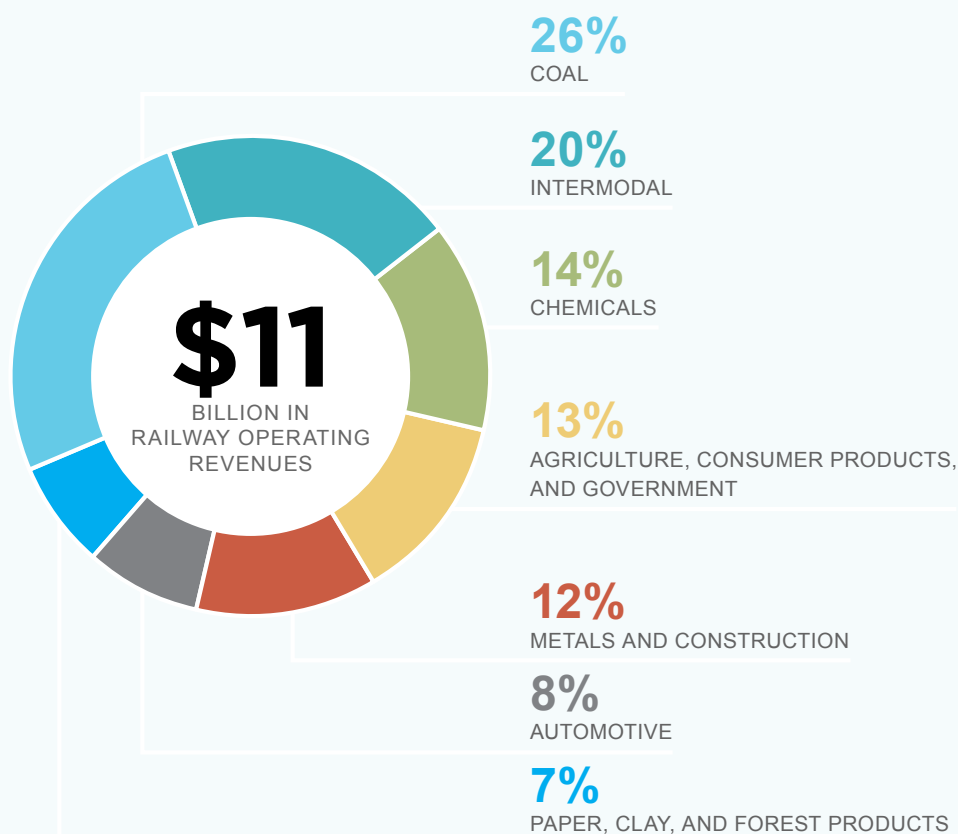
The freight we haul for customers is classified in the following market groups, along with the percentage of total railway operating revenues each group contributed to our business in 2012:

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:



2012 RAILWAY OPERATING REVENUES BY MARKET GROUP



Although most of our customers are domestic, the ultimate points of origination or destination for some of the products we transport are outside the United States—particularly intermodal containers and coal bound for export to countries in South America, Asia, Europe, and elsewhere.

Norfolk Southern makes available its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports on its website as soon as possible after such material is filed with the U.S. Securities and Exchange Commission.

In addition, the following documents are available on the company's website and in print by request:

- **Corporate Governance Guidelines**
- **Charters of the Committees of the Board of Directors**
- **The Thoroughbred Code of Ethics**
- **Code of Ethical Conduct for Senior Financial Officers**
- **Categorical Independence Standards for Directors**

Financial Performance

A solid business year in 2012

After experiencing our best-ever economic performance in 2011, Norfolk Southern in 2012 had what our CEO describes as the railroad's second best-ever year: We recorded our second best revenue, operating income, net income, and earnings per share.

For the second consecutive year, our railway operating revenues exceeded \$11 billion, bolstered by a 6 percent increase in merchandise revenues and a 5 percent increase in intermodal revenues.

We moved a record 3.1 million units of conventional intermodal freight, which includes domestic, international, and premium traffic. Overall intermodal volume was up 5 percent, driven by an 11 percent increase in domestic volume. Intermodal traffic in 2012 accounted for 47 percent of the railroad's freight by volume and generated 20 percent of total railway operating revenues, second only to coal.

In our merchandise markets, total volume rose 2 percent in 2012, buoyed by higher railcar loadings in the chemical, automotive, and forest product sectors. Our chemical business benefited from the growing U.S. production of gas and oil, including our first full year of rail shipments of crude oil to East Coast refineries. Our rise in automobile traffic reflected increasing vehicle sales, while improvements in the housing industry spurred traffic in forest products—both good signs for the U.S. economy.

Our coal business, hampered by low natural gas prices and mild weather, dragged on our revenues and volumes in 2012. Coal revenues were down 17 percent—or more than \$500 million—and coal volume declined 13 percent versus 2011. For the year, coal generated 26 percent of our total railway operating revenues, a drop from 31 percent in 2011. Given the double-digit drop in coal revenues, the fact that total railway operating revenues were down by only 1 percent in 2012 is a positive reflection of our balanced business portfolio.

Because of a renewed emphasis on productivity, operating efficiencies, and effective cost controls, we reduced railway operating expenses by 1 percent for the year. Even with the losses in coal revenue, our operating ratio increased by less than 1 percent in 2012, to 71.7 from 71.2 in 2011. We achieved a record low operating ratio of 71.1 percent in 2008.

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:


EC1
EC8

We remained at the forefront of job creation and economic development across our network in 2012. We helped to locate 64 new industries and 30 industry expansions along our railroad, representing \$2.1 billion in customer investment and the potential for more than 6,100 new jobs and 141,000 carloads of new business. We hired more than 2,300 new employees during the year, bringing good-paying jobs to the communities we serve.

FINANCIAL HIGHLIGHTS

	2009	2010	2011	2012
AVERAGE NO. OF EMPLOYEES	28,593	28,559	30,329	30,943
RAILWAY OPERATING REVENUES (in billions)	\$8.0	\$9.5	\$11.2	\$11
INCOME FROM RAILWAY OPERATIONS (in billions)	\$2.0	\$2.7	\$3.2	\$3.1
NET INCOME (in billions)	\$1.0	\$1.5	\$1.9	\$1.7
TOTAL ASSETS (in billions)	\$27.4	\$28.2	\$28.5	\$30.3
TOTAL DEBT (in billions)	\$7.2	\$7.0	\$7.5	\$8.7
STOCKHOLDERS' EQUITY (in billions)	\$10.4	\$10.7	\$9.9	\$9.8
TOTAL DEBT TO TOTAL CAPITALIZATION RATIO	40.90%	39.70%	43.20%	47.10%
STOCKHOLDERS' EQUITY PER SHARE	\$28.06	\$29.85	\$30.00	\$31.08

Future Track Committee

On track to the future

The processes we're using in Future Track are going to make the railroad safer, more efficient, more productive, and more profitable. At some level, one or more of these processes is going to touch every single employee on the railroad.

Deb Butler, executive vice president and chief information officer, and chair of Future Track Steering Committee

Norfolk Southern has developed a rigorous process to identify, prioritize, and implement initiatives that enable us to meet annual business goals while ensuring long-term success as a transportation-industry leader. Our Future Track Steering Committee helps lead the effort.

Every month, most of our company vice presidents gather at our Norfolk headquarters, with some joining in from regional offices in Atlanta and Roanoke via telepresence screens. Their mission: to help the railroad improve performance in six broad areas: safety, service, asset utilization, fuel efficiency, revenue growth, and workforce productivity.

This committee was formed in 2007, when we launched a five-year strategic plan known as Track 2012. In 2012, after meeting a number of key goals, we adopted another plan, Future Track, that outlines long-term business strategies and gives us the flexibility to update goals annually to respond to unexpected changes in the U.S. and global economic conditions.

The renamed Future Track Steering Committee reflects the importance we place on maintaining a competitive edge in an era of rapidly changing business markets. The Future Track plan helps ensure that strategic projects get the right support, the right priority, and the right resources. Among other things, Future Track is helping us to become a better railroad by:

- **Getting new technologies into the hands of frontline workers to make their jobs safer and easier and to help them make better decisions. Dispatchers, locomotive engineers, and conductors, in particular, have benefitted**
- **Targeting capital investments in equipment, infrastructure, and technologies based on business and operational priorities**
- **Providing new insights into our business operations, including sponsoring studies that examine such things as how customer service levels and train network velocity affect operating costs**

In short, Future Track is transforming how our railroad operates and ensuring that we meet the needs of customers in the 21st century. It's helping us accomplish our goal of being a sustainable corporation, and being the safest, most customer-focused and successful transportation company in the world.

KEY FUTURE TRACK TECHNOLOGY INITIATIVES:**Unified Train Control System (UTCS)/Movement Planner**

Using advanced algorithms coupled with our corporate business objectives, UTCS, a next-generation dispatching system, and Movement Planner generate optimal train movement plans for our entire rail network. As they have been rolled out, these technologies have helped us to improve network velocity, boost employee productivity, and make better use of locomotive and railcar assets.

Process Control Implementation

This initiative is automating the railcar classification process at our hump yards, including car speed, spacing, and switch positions.

Geographic Information System

Aerial mapping of our entire rail network has been completed, and integration with our various enterprise operating systems is occurring. The GPS-based mapping allows us to pinpoint the location of every piece of infrastructure on the network, including sidings, switches, and signals.

Locomotive Engineer Assist Display Event Recorder (LEADER)

LEADER prompts locomotive engineers on optimal train handling to achieve maximum fuel efficiency on long-haul freight moves. LEADER-equipped locomotives now are running on main lines in all three of our operating regions.

Top-of-Rail Friction Modification

These solar-powered systems that dispense a lubricant to the top of both rails to decrease wheel-to-rail friction, reducing wear and tear on wheels and rail and conserving energy, are operating on strategic lines across our network.

Remote Intelligent Terminal

This wireless technology enables conductors to send and receive work assignments in near real time to deliver or pick-up railcars for customers, improving employee productivity and customer service. We completed our initial systemwide rollout of the handheld devices in February 2013.

Remote Control Locomotives (RCL)

This remote technology enables a ground operator to control a locomotive via radio signals sent to an onboard computer. To date, more than 1,000 employees have been certified as RCL operators, and RCL locomotives operate in some of our largest rail yards, increasing efficiency and safety of operations.

Wayside Detection Systems

These remote systems monitor passing trains for wheel defects, and NS now has a 24-hour help desk that manages preventive wheel alerts. In 2012, we implemented alerts for dragging equipment devices.

InnovationNS program

InnovationNS revs up with HorsePower

Innovation is a core value embodied in Norfolk Southern's SPIRIT culture, and we encourage employees to seek creative solutions to business challenges. We have a Corporate Innovation Council, an InnovationNS program, and a manager assigned to promote innovation companywide.

When it comes to improving Norfolk Southern's performance in safety and service, the most creative ideas often come from our employees. That's the basis for an InnovationNS program launched in 2012 known as HorsePower.

HorsePower chapters have been formed by a cross-section of employees on the Illinois Division and in our Goode office tower in Atlanta. The groups brainstorm ideas to enhance safety and service and encourage coworkers to share their ideas and become more involved in addressing challenges facing the railroad. Ideas have included creation of a local locomotive reliability form to verify that reported engine problems have been repaired, and a Quick Response bar code system to schedule use of office conference rooms.

"The goal is to bring people together, take an idea, shape it and implement it, and get things done," said Dawn Plotner, manager of customer service operations and chair of the Atlanta HorsePower chapter.

The railroad's Corporate Innovation Council introduced InnovationNS in 2008 to help achieve the company's long-term goals. Employees can submit suggestions to improve safety and service to innovations.nscorp.com.

"Innovation at Norfolk Southern is part of the fabric of who we are," said Derek Bond, who oversees InnovationNS as manager of program management. "We are continually seeking new ways to get employees involved. We can't reach our goals if we do not take steps to become better. We have to be more efficient, more effective, and more productive. If we are able to do that, we will continue to be a leader in our industry."



Derek Bond, Manager
of Program Management,
Norfolk Southern

Supporting Economic Development

Norfolk Southern is an economic engine that attracts commercial development. We help create jobs, stimulate business growth, and generate tax revenue for building stronger communities across our 22-state network.

NS KEEPS THE ECONOMY MOVING

Promoting the economic vitality of the communities we serve is a critical element of our commitment to responsible corporate citizenship. We support local and state economic development departments as we help customers identify the best locations to build and expand facilities along our rail system.

In 2012, we participated in the location of 64 new industries and the expansion of 30 existing industries. That represented a \$2.1 billion investment by our customers, with the expectation of creating more than 6,100 jobs and generating more than 141,000 carloads of new rail traffic annually.

Much of the investment came from the energy sector, including coal, crude oil, nuclear power, and natural gas. Of the 94 economic development projects we assisted with in 2012, 32 of them, or a third, involved the location or expansion of energy-related facilities—spread across 14 states on our network.

Some of the development will support exploration and drilling for natural gas in the Marcellus Shale and Utica Shale deposits in Pennsylvania, West Virginia, and Ohio. Those mining activities, which provide good jobs and tax revenues, have become robust business for our metals and construction market over the past four years. We're now moving tens of thousands of rail carloads annually of "fracturing" sand, pipe, and other materials used in the drilling and recovery process.

2012 also marked the first full year of an emerging market in transporting crude oil by rail. We are working with interline rail partners to transport unit trains of crude from the Bakken Formation in North Dakota and Canadian shale fields to East Coast refineries. The Sunoco Logistics Terminal Facility in Westville, N.J., was the first major crude oil terminal to come online for Norfolk Southern and one of 2012 economic development projects on our network.

PBF Energy in 2012 began construction to add two 100-car loop tracks at its Delaware City, Del., refinery. Our industrial development group, along with our transportation and engineering departments, worked closely with PBF to help plan the expansion and ensure efficient movement of trains in and out of the revamped facility.

Several development projects in 2012 were associated with markets for export thermal and metallurgical coal. About 21 percent of export coal moved by Norfolk Southern in 2012 was for power generation, up from less than 1 percent in 2011. Growing international demand for thermal coal could help offset declines in our domestic utility coal franchise.

In addition, we worked with ThyssenKrupp Steel USA in 2012 on plans to expand its steel mill in Calvert, Ala., and assisted Georgia Power and South Carolina Electric & Gas in the expansion of their nuclear power plants.

An economic engine

In the past decade on our network:

- More than 1,021 facilities
- Nearly \$29 billion in investment
- More than 48,000 jobs created

In our Northern Region, on our Pan Am Southern Corridor, we invested in new automotive distribution terminals in Mechanicville, N.Y., and Ayer, Mass., part of our strategy to expand business in New England markets. That has made us more attractive to auto customers looking for a broad geographic supplier as the automotive market rebounded in 2012. Other automotive projects during the year included expansions of an auto loading facility in Detroit and a Honda plant in Indiana.

Other significant non-energy projects included a Georgia customer that completed a major expansion of a facility that processes kaolin, an industrial mineral used in the manufacturing of various products, including paper and plastic goods. Customers also opened a number of warehouse and distribution facilities that handle commodities ranging from food products to construction materials.

Over the past 10 years, Norfolk Southern's Industrial Development Department has helped locate or expand 1,021 facilities. That represents a \$28.7 billion investment by our customers, generating more than 48,000 jobs in areas served by the railroad.

Working with communities to ensure they have available land for industrial sites, our Industrial Development team joins state and local authorities in marketing sites served by us or our short-line railroad partners. We offer free, confidential plant-location services, including site-assistance planning, track design, and logistics support.

IN THIS SECTION

NETWORK IMPROVEMENTS AND EFFICIENCIES

OUR KEY PUBLIC-PRIVATE PARTNERSHIPS

Network Improvements and Efficiencies

Our rail corridor strategy offers sustainable solutions.

In the U.S. freight transportation industry, all signs point to continued growth in rail intermodal business—congested highways, truck driver shortages, diesel fuel costs, and shippers looking for a more environmentally friendly mode to move their goods.

Norfolk Southern has developed an aggressive rail corridor strategy to satisfy the growing demand for intermodal service, including public-private partnerships and joint ventures with rail partners. By improving the efficiency and capacity of our train network, these corridor projects advance our sustainability goals on all fronts—environmental, economic, and social. They help us and the country conserve fuel and reduce greenhouse gas emissions, create good-paying jobs and tax revenue for communities, and expand opportunities for economic growth.

FIRING ON ALL CYLINDERS

After 15 years of planning, development, and investments totaling hundreds of millions of dollars, Norfolk Southern ended 2012 with three out of our four primary intermodal corridor initiatives substantially completed. Significant progress was made on our fourth, the Crescent Corridor, with the opening of new intermodal terminals and track infrastructure upgrades. Because these corridors are main network arteries, the added capacity and faster transit times created for intermodal trains will help us improve customer service and boost business prospects for all of our business markets.

THE CRESCENT CORRIDOR positions us to compete head-to-head with long-haul trucks, opening up a substantial market potential for highway-to-rail conversions.

THE HEARTLAND CORRIDOR offers a shorter, more efficient route for double-stack international freight moving between Virginia port terminals and Midwest markets.

THE PAN AM SOUTHERN CORRIDOR, a 2009 joint venture with Pan Am Railways, expands our reach into New England markets.

THE MERIDIAN SPEEDWAY, a 2005 joint venture with Kansas City Southern Railway, gives us the shortest rail route between California and the Southeast.

MEETING U.S. FREIGHT TRANSPORTATION NEEDS

Norfolk Southern is a leader in seeking innovative solutions to the nation's transportation challenges. We worked with state and federal officials in the mid-2000s to create the rail industry's first multistate public-private partnership to improve the efficiency and capacity of the country's freight rail network. Since then, we have formed additional partnerships to expand the movement of goods by environmentally friendly rail.

Through these partnerships, federal and state governments contribute a percentage of the projects' costs based on public benefits generated. These benefits include jobs and tax revenue; economic development; less congestion and fewer truck-related accidents on interstate highways; reduced costs on maintenance and new construction of roads and bridges; and an overall decline in fuel use and greenhouse gas emissions.

Public participation allows these large-scale corridor projects to be completed much sooner than they otherwise would be, thereby accelerating the public benefits associated with them.

Our Key Public-Private Partnerships

CRESCENT CORRIDOR

Our 2,500-mile Crescent Corridor improvement project is the railroad's largest corridor undertaking. It is the centerpiece of our business strategy to convert domestic freight transportation from highway to intermodal rail, with all the environmental, economic, and social benefits associated with rail. We saw a 21 percent increase in traffic volume over the Crescent Corridor in 2012 vs. 2011.

The corridor improvements are significantly increasing the capacity for U.S. intermodal freight, one of the railroad's most promising growth markets. The corridor offers the shortest intermodal double-stack route between the South and the Northeast, forming a national rail network that spans 11 states from New Orleans, La., and Memphis, Tenn., to northern New Jersey. The route provides truck-competitive service along several major interstate highways, including I-81, I-85, I-20, I-40, I-59, I-78, and I-75.

By the end of 2012, we had completed the first phase of improvements. The big news in 2012 was the opening of two new regional intermodal terminals—at Rossville, Tenn., near Memphis and at McCalla, Ala., near Birmingham. In early 2013, we opened a third terminal in south central Pennsylvania, at Greencastle.

The new terminals feature high-tech touches such as automated gate systems with digital cameras and scanners that speed the flow of truckers who move containers and trailers between the facilities and a customer's door. Results are that trucks idle less, drivers are more productive, and fuel costs and emissions are reduced.

By 2014, we plan to open another corridor terminal in Charlotte, N.C., and major expansions at two intermodal facilities in Harrisburg, Pa. In addition, we are investing in track infrastructure improvements to add passing tracks, straighten curves, and install signals to streamline the movement of freight across the corridor.

As a testament to the corridor's economic and environmental benefits, the project has been endorsed by leading business associations in Alabama, Maryland, North Carolina, Pennsylvania, Tennessee, and Virginia and by conservation-minded groups such as the Southern Alliance for Clean Energy, A Greener Gulf Coast, the Southeast Energy Efficiency Alliance, and the Virginia Chapter of the Sierra Club.

Independent studies conducted for the railroad estimate that the corridor, when fully developed, has the potential to:

- Divert more than 1 million long-haul trucks from interstate highways along the route
- Save more than 160 million gallons of fuel annually
- Reduce greenhouse gas emissions by 1.9 million tons
- Create or preserve more than 70,000 jobs by 2030
- Avoid more than \$100 million in accident costs
- Save more than \$500 million in costs associated with traffic congestion
- Save more than \$90 million in highway maintenance

4.13

Memberships in associations and/or national/international advocacy organizations.

HEARTLAND CORRIDOR

The Heartland Corridor, completed in fall 2010, was the rail industry's first multistate public-private partnership. It is the flagship corridor for our international intermodal business, creating a shorter, more efficient route for moving international freight on double-stack trains between Virginia port terminals and Midwest consumer markets.

The project was one of the most challenging railroad engineering feats in modern times. The route passes through the Appalachian Mountains; clearing it for trains moving containers that are double-stacked involved raising the vertical clearance of 28 tunnels and removing 24 overhead obstructions. The improvements shaved about 250 miles and a day of transit time off a more circuitous route we had been using.

The corridor is producing benefits for customers, the public, and our company. With a shorter transit time, we're saving on equipment costs because the turnover on railcars and locomotives is faster. By eliminating about 25 percent of the miles off the former double-stack route, we're burning less fuel and reducing locomotive greenhouse gas emissions.

In 2012, traffic volume on the corridor increased by 26 percent over 2011. Early in the year, we expanded the corridor's reach by opening the Heartland Connector, providing for the first time double-stack capability between Columbus and Cincinnati, Ohio. The improvements have improved service reliability and transit time of double-stack freight moving from Virginia ports to Cincinnati and Detroit. The additional capacity makes it possible for us to connect Ohio Valley markets to other major East Coast container ports.

Many new business possibilities arise from linking the Heartland to our other primary corridors. For example, we now can move double-stack trains between the Midwest and Mexico via the Heartland Connector, the Crescent Corridor, and the Meridian Speedway. In addition, we can move freight between Dallas, Texas, and the Northeast by linking the Meridian Speedway and the Crescent Corridor.

The Heartland Corridor supports a national goal to grow U.S. export volumes. As global economic conditions improve, we expect business on the corridor to continue to grow, particularly after the Panama Canal expansion is completed in 2014, enabling larger ships to call on East Coast ports. Increased use of the Suez Canal by international container ships offers another avenue of growth.

CREATE

Known by its acronym, the \$3.2 billion Chicago Regional Environmental and Transportation Efficiency project is designed to reduce rail and highway congestion and add freight and passenger capacity in the metropolitan Chicago area. The CREATE partnership involves the U.S. Department of Transportation; the Illinois Department of Transportation; Chicago; the six largest North American freight rail carriers, including Norfolk Southern; and two passenger carriers, Amtrak and Metra.

Chicago is one of the nation's busiest and most congested rail intersections, with 2,800 route miles of track and about 500 freight and 800 passenger trains passing through daily. It is a key interchange point for domestic and international freight rail traffic moving to and from the East and West coasts. It's also a bustling hub for Amtrak passenger rail service and Metra commuter trains. Currently, freight and passenger trains share many of the same rail lines, often leading to traffic conflicts and delays.

The CREATE improvements, financed by the railroads and public partners, target 70 rail and highway infrastructure projects, including 40 that will reduce delays for Amtrak and Metra passenger trains. Some of the major projects, such as the so-called Englewood Flyover, will separate freight and passenger trains to eliminate conflicts and congestion. Other projects will separate rail and highway traffic, resulting in reduced fuel consumption and greenhouse gas emissions for rail and vehicle users.

To date, investment in CREATE projects has reduced freight rail delays by more than 25 percent and passenger rail delays by a third.

Strengthening Connections

Norfolk Southern recognizes the value of collaborating with customers and business and industry partners to improve our sustainability efforts, which, in turn, generate environmental, economic, and social benefits.

SYMPOSIUM ON SUSTAINABILITY

To celebrate and advance sustainability within the rail industry, Norfolk Southern has partnered with GE Transportation, a major supplier of fuel-efficient, low-emissions locomotives, to cosponsor two railroad symposiums on sustainability. The second was held in 2012 at our 14,000-acre Brosnan Forest Conference Center near Charleston, S.C.

We like the way Pete Lawson, ecomagination leader at GE Transportation, described the symposium's aim: At GE, we believe that innovation can solve the world's toughest challenges. When you add to that collaboration with partners like Norfolk Southern, together we can work to deliver more efficient and economical environmental solutions that our industry demands.

During the three-day symposium, attendees learned about best practices in sustainability from a range of speakers, including customers who ship freight on our network. For example, Steve Leffin, global sustainability director for UPS, one of our largest premium intermodal shippers, spoke about the importance of measuring, managing, and mitigating business-related carbon emissions. Max Metcalf, government and community relations manager for BMW Manufacturing, one of our valued automotive customers, discussed a shipper's view of sustainability. Metcalf talked about how BMW—auto industry leader on the Dow Jones Sustainability Index for eight consecutive years—uses rail to transport cars, removing tens of thousands of tractor-trailer trucks from interstate highways and reducing greenhouse gas emissions.

Other speakers represented such organizations and companies as GreenOrder, the National Fish and Wildlife Foundation, C2Invest, Chesapeake Energy Corporation, TFC, and Coca-Cola. In between sessions, attendees toured our Brosnan Forest preserve to learn more about its unique longleaf pine ecosystem and how we help protect endangered red-cockaded woodpeckers that live in the forest.

HOW SHIPPERS CAN REDUCE EMISSIONS

For shippers interested in boosting their sustainability efforts, we have made it easy and efficient to calculate cost-effective ways to do so. Several years ago, we developed a carbon footprint analyzer—we call it our Green Machine—to show shippers how they can reduce their supply-chain carbon footprint by using rail instead of highway to transport freight.

The calculator is accessible on our corporate website. Shippers can compare the greenhouse gas emissions of intermodal and rail with that of trucks when moving freight over specific routes. Companies headquartered in Europe, where businesses buy and sell carbon credits on a government-mandated carbon market, can use the calculator to estimate a dollar value on the reduction in greenhouse gas emissions. In this way, Norfolk Southern is helping customers reduce their carbon footprints and achieve their sustainability goals.

4.13

Memberships in associations and/or national/international advocacy organizations.

PARTNERING WITH TRUCKING COMPANIES

In our intermodal business, trucking companies are among our largest customers, transporting freight to and from our terminals to a customer's door. To help improve their fuel efficiency and productivity, we have installed automated gate systems at certain terminals that use digital cameras and scanning equipment to identify arriving or departing freight containers. These have helped slash "dwell time" for dray trucks at those terminals by a third—to 22–24 minutes now from 36 minutes in 2005. Over a year, those avoided 12 to 14 minutes per truck add up to millions of dollars in savings and substantial reductions in fuel use and emissions.

WORK WITH OTHER BUSINESS LEADERS

Norfolk Southern was the first railroad member of **SEE Change** (Society, Environment, Economy), launched in 2005 by Business Roundtable, an association of chief executive officers of leading U.S. companies, to promote better business and a better world. In Business Roundtable's Sustainability Progress Report 2013, more than 90 CEOs, including Norfolk Southern's Wick Moorman, reaffirmed their commitments to sustainability. Our CEO's statement can be found on page 106 of the report.

JOINING FORCES WITH INDUSTRY PARTNERS

Our company is a member of various industry organizations that promote the economic and environmental interests of Norfolk Southern and business partners. Through our memberships with the American Coalition for Clean Coal Electricity (ACCCE) and the Virginia Center for Coal and Energy Research, for example, we provide financial support for education and research efforts that aim to develop and implement advanced clean-coal technologies.

During 2012, our CEO, Wick Moorman, served as board chairman of the ACCCE, which supports policies meant to ensure affordable, reliable, domestically produced energy while also supporting the development and deployment of technologies that would further reduce the environmental footprint of coal-fueled electricity generation. These include technologies to capture and safely store carbon dioxide emissions.

SUPPORT OF CLIMATE INITIATIVE

Norfolk Southern is a founding member and supporter of the Destination Gigaton Initiative, a climate program developed by the Carbon Disclosure Project® and the World Wildlife Fund.

This initiative, launched in 2012, encourages industry to reduce greenhouse gas emissions by approximately 1 gigaton by 2020, in line with scientifically based climate targets. One gigaton is equal to 1 billion metric tons.

NS Intermodal Provides Failure-Free Service

Promises made, promises kept

Norfolk Southern's intermodal group markets our rail network as a way for shippers to move goods more efficiently and cost-effectively than using trucks over the highway. In addition, the ability to reduce supply-chain greenhouse gas emissions is drawing more shippers to rail.

The real key to our premium business, however, is the railroad's superior network and service reliability, said **Randy Survant**, our director of intermodal marketing.

"For years, our service was our contract—as long as we performed to where we said we would, we got the business," Survant said. "In recent years, we've gone to a more formal contract, but performance is still what drives our focus."

A prime example is our intermodal group's premium service, geared toward customers who have highly time-sensitive freight, such as UPS, the world's largest package delivery company. In 2012, for the second consecutive year, we delivered failure-free premium service for UPS during "peak season," the four-week period between Thanksgiving and Christmas Eve.

Failure-free service means every Norfolk Southern train transporting UPS packages during the peak met service expectations. To appreciate the high level of performance our employees provided, consider the numbers: During the peak, our trains moved more than 16,000 UPS loads. With each load containing 1,500 to 2,000 packages, we met UPS expectations for delivering as many as 32 million packages. That made for a lot of satisfied UPS customers.

Achieving failure-free service requires planning, coordination, and hard work from a lot of employees in our operating, marketing, and network service departments.

"This is not just about intermodal," said **David Osborne**, our group manager of intermodal service. "It's the train and engine crews, it's the transportation folks in the field, it's the mechanical folks. Nobody wants to be the person who fails, and nobody wants to see our company fail. There's a lot of pride put into this."

2012 Capital Investments

Capital projects sustain business

With track infrastructure in 22 states, Norfolk Southern is a capital intensive company and must make significant investments to ensure our ability to provide safe, efficient, and reliable rail transportation services. We also plan strategic capital investments to expand business opportunities and to reduce environmental impacts of our operations, while returning value to shareholders.

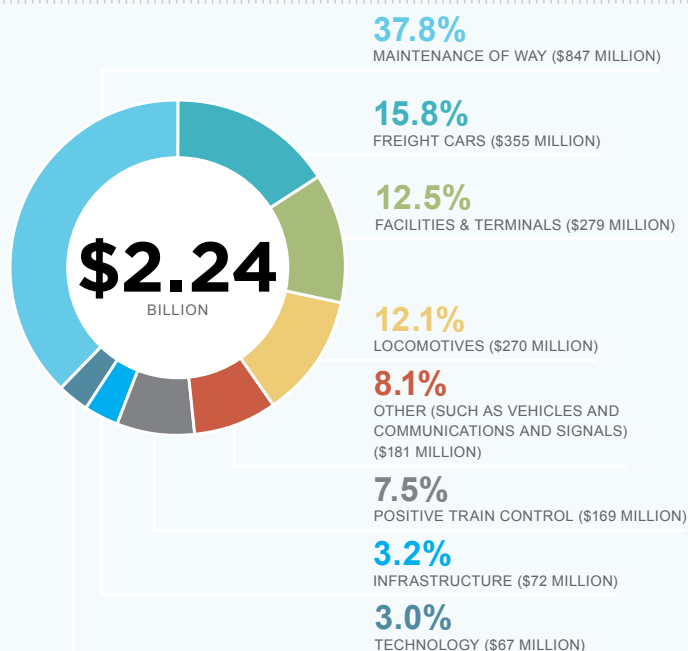
In 2012, we invested a record \$2.24 billion on capital projects, a nearly 4 percent increase over 2011. Our largest investments involved maintenance and replacement of rail infrastructure; the purchase and rebuild of freight cars and locomotives; and construction projects at facilities and terminals.

During the year, we installed 509 track miles of rail, surfaced 5,642 miles of track, and installed 2.6 million new crossties. More track miles of rail were installed and surfaced than in any of the previous five years.

Our expenditures on locomotives contributed to ongoing efforts to improve fuel efficiency and reduce emissions, covering the purchase of 60 new AC-powered units and an expansion of our in-house locomotive rebuild program. Our freight car program directed investment in new and rebuilt coal cars, intermodal containers and chassis, and multilevel automobile racks.

Our expenditures on facilities and terminals focused on intermodal terminals and equipment that will add capacity to our intermodal network, bulk transfer facilities, and mechanical service shops. Two noteworthy projects under construction in 2012 were a new locomotive repair and maintenance shop at our Conway, Pa., rail terminal and an approximately \$160 million, multiyear expansion that will nearly double the size of our classification hump yard in Bellevue, Ohio. The Bellevue expansion is designed for projected increases in business volume through our Northern Region.

2012 CAPITAL EXPENDITURES BY CATEGORY



Customer Service

Norfolk Southern has a solid track record of introducing new technologies to improve our business operations and customer service.

During 2012, for example, we improved the look and functionality of our online business portal; completed initial rollout of a handheld device for train and engine crews that streamlines customer railcar pickups and deliveries; and implemented a GPS-based tool that generates an online report when trains arrive and depart from terminals. In addition to enhancing the services we offer shippers, these technologies also have improved employee productivity, increased operations efficiencies, and reduced operating costs.

E-COMMERCE AT YOUR FINGERTIPS

Our service management, e-commerce, and marketing departments have collaborated on a range of online offerings to assist shippers. Through our accessNS Resource Center portal, customers can track rail shipments online, receive text-message alerts on cell phones or handheld devices when railcars reach their destination, and get quick answers to questions in “live chat” sessions with our e-commerce help desk.

The interactive accessNS portal has eliminated a lot of paperwork, minimized errors, and generated significant savings for customers and us. In 2012, we introduced an improved version. In addition to adopting a more colorful, modern look, we added desktop functionality that allows customers to work in multiple applications during one session. For example, a customer can open one application to access a bill of lading report, “park” that report on the tab bar, and open another application to trace a railcar number to verify information in the bill of lading. Using the previous version, customers could open only one application at a time; they would have to close the bill of lading application to trace a railcar.

The new version of accessNS updates the movement of car shipments in near real-time, giving customers more accurate and timely information. Also, customers now can use accessNS on both Microsoft Windows and Apple Mac operating systems, as well as on handheld mobile devices, enabling them to conduct business on their iPad, smartphone, or Android tablet from wherever they may be.

A MILESTONE FOR ‘RIT’

By the end of 2012, Norfolk Southern had distributed Remote Intelligent Terminal (RIT) devices to rail yards in all three of our operating regions and our Conrail Shared Asset Properties. Train and engine crews use the wireless GPS-based device to receive and transmit work orders to place and pull cars for industry customers and interline rail partners at interchanges.

We began developing RIT in 2009, assembling a group of 22 conductors to help perfect the new technology and train coworkers on use of the rugged handheld device. They worked alongside Microsoft programmers, who wrote the operating software.

RIT has eliminated paperwork orders, increased the productivity of train crews and operations support employees, and improved customer service. When customers order and release freight cars

PR5

Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.

We use technologies to improve service and business operations

through our online application Pacesetter, for example, their requests are automatically transmitted to the appropriate train crew's RIT device.

With railcar information moving electronically, our OSS office employees no longer have to manually type information into the railroad's Thoroughbred Yard Enterprise System, a centralized computer system for reporting yard activity. This innovation has improved accuracy and timeliness.

RIT also has improved our asset utilization. RIT is helping us turn our rail cars quicker and get them back out on trains for reuse, so we need fewer cars to do the same amount of work.

TRACKING TRAINS AND CARS WITH GPS

A systemwide rollout of GPS-enhanced reporting of train arrivals and departures at railroad terminals is another significant technology achievement in 2012.

We created the system by installing GPS devices on long-haul "road" locomotives and using geofencing software at rail yards. Geofencing establishes a boundary that automatically records the time of arriving and departing locomotives and railcars. The use of Remote Intelligent Terminal at local and yard operations performs the same function when railcars are pulled or placed for sorting and delivery. Customers can access the information through our online Pacesetter portal.

"This is giving customers and us more timely and accurate reporting," said Brad Fitzgerald, our director of Operations Service Support in Atlanta. "This gives customers real-time visibility of their assets in motion, and it gives them greater flexibility to meet their customers' demands."

Customer Recognition

Norfolk Southern strives to deliver top-notch service to customers and to be an industry leader in overall economic performance. We are honored and gratified when our efforts are recognized by others.

PERFECT SERVICE FOR UPS

For the second consecutive year, Norfolk Southern earned recognition from UPS for delivering failure-free service during “peak season,” a four-week period between Thanksgiving and Christmas Eve. During this period, we moved 16,103 loads for UPS. With each load containing 1,500 to 2,000 packages, we delivered as many as 32 million packages to destination with a train performance that met UPS’ high level of service expectations.

A QUALITY RAILROAD

Norfolk Southern earned high marks in Logistics Management magazine’s *2012 Quest for Quality* reader survey. Among six rail and intermodal service providers, Norfolk Southern earned the highest scores in on-time performance and information technology. Our railroad tied with BNSF Railway, an interline rail partner, with the highest overall score in five categories. In the other categories, we had the second highest score in customer service and the third highest score in value and in equipment and operations.

To score service providers, Logistics Management and Peerless Research Group surveyed 4,709 readers of the magazine who are qualified buyers of logistics and transportation services.

SOCIALLY RESPONSIBLE STOCK

Norfolk Southern during 2012 was named a Top 25 Socially Responsible Dividend Stock by Dividend Channel, an online investment research website owned by BNK Invest Inc. The site, which focuses on dividend paying stocks, said that Norfolk Southern is “recognized by prominent asset managers as being a socially responsible investment, through analysis of social and environmental criteria.” Criteria include the environmental impact of a company’s products and services and its efficiency in terms of its use of energy and resources. Social criteria include elements such as human rights, corporate diversity, and a company’s impact on society.

In January 2013, Dividend Channel named Norfolk Southern as the Top Dividend Stock of the Dow Jones Transportation Average, a stock index that is a price-weighted running average of 20 U.S. transportation stocks.

TRIPLE CROWN EARNS SERVICE AWARDS

Our Triple Crown Services affiliate, which offers door-to-door truckload service, earned recognition for superior service from several customers in 2012. Triple Crown operates a unique RoadRailer trailer that can transport goods over rail and road.

Triple Crown received the following awards:

- **Toys-R-Us: 2011 Truckload Carrier of the Year** (received in 2012)
- **Logistics Management Quest for Quality** award for intermodal service
- **Schneider Logistics: 2011 Carrier of the Year** (received in 2012)
- **Procter & Gamble: Transportation Award for Operational Excellence**, for September 2010–March 2012 period
- **Johnson Controls Inc.: Logistics Provider of Excellence 2012** award
- **United Sugars Corporation: Service in Excellence 2012** award

SOCIAL PERFORMANCE

Norfolk Southern recognizes that our ability to thrive as a business is connected to the health of our communities, our environment, and our employees. Our corporate success reflects the dedication, talent, and hard work of our people.

Our commitment to social responsibility begins with an emphasis on a safe working environment. We also want to provide our employees with good-paying jobs and meaningful careers. We promote workplace diversity and a well-trained, healthy workforce. Our company and our employees support the communities where we live, work, and play, providing financial assistance and volunteer hours to help make our neighborhoods better places to live.

IN THIS SECTION

[OUR CULTURE OF SAFETY](#)

[BEHAVIOR-BASED SAFETY](#)

[2012 EMPLOYEE SAFETY PERFORMANCE](#)

[NS ERGO CUP COMPETITION](#)

[NS AS AN EMPLOYER STATEMENT](#)

[NS IN THE COMMUNITY](#)

Our Culture of Safety

Safety at Norfolk Southern is our No. 1 priority. It is the “S” in our SPIRIT values, and it is listed first on purpose. All of our other corporate values – performance, integrity, respect, innovation, and teamwork – link in some way to safety.

Our safety goal is to eliminate high-risk, high-impact behaviors and incidents that result in fatalities, injuries, and operations incidents. The safety processes we have implemented and continue to evolve have been developed with this goal in mind.

Norfolk Southern’s safety efforts start in CEO Wick Moorman’s office. Everywhere he goes on the system, he reminds employees to work safely, stressing that unsafe behavior has consequences for themselves, coworkers, the company, customers, and their families.

Our safety efforts are led by some 130 local safety and service committees at terminals, yards, shops, and facilities. These interdepartmental committees are chaired by operations employees in mechanical, transportation, and engineering. Department managers provide support and the resources to carry out safety initiatives. This “bottom-up” approach encourages buy-in, because employees share responsibility for ensuring that our safety processes are successful.

During the past year, we began a systematic effort to monitor the “leading indicators” of our safety performance. These indicators are processes we follow to ensure a safe working environment. One key leading indicator, for example, is job safety briefings. Operations employees are expected to hold safety briefings at the start of each shift and during the day when appropriate to discuss work assignments, special challenges they may face, such as weather conditions, and relevant safety rules based on work activities planned.

Another key leading indicator is safety “checkups.” Their primary purpose is to give managers and safety committee members an opportunity to recognize and reinforce the behavior of employees who follow safety rules. Through positive reinforcement, we are promoting safe behavior and discouraging undesired behavior while further improving relations between supervisors and employees.

For 23 consecutive years, from 1989 to 2011, our employees’ safety performance earned Norfolk Southern the Harriman Gold Award from the Association of American Railroads as the rail industry’s safest Class 1 railroad. In 2012, AAR ended the awards after 99 years, at the urging of members who wanted to focus on collaborating to make all railroads safer rather than treating safety as a competition.

Our employees’ commitment to safety has remained steadfast. It is their dedication and hard work that makes safety a success at Norfolk Southern.

Behavior-Based Safety

On track with culture change to improve safety and service

In 2012, Norfolk Southern began implementing changes in our safety and operating culture. We shifted to a behavioral science approach that emphasizes positive reinforcement to recognize safe work behaviors. The goal is to create a more positive work environment that further enhances safety and job performance.

Because safety and service go hand in hand at Norfolk Southern, our efforts to improve safety have contributed to improvements in customer service and gains in productivity.

"People in a wide variety of areas are more engaged in doing positive things to help make a difference," said Mark Manion, executive vice president and chief operating officer, who has led the company's efforts.

Assisting us is Aubrey Daniels International, a consulting firm that specializes in behavioral science processes to improve business performance. ADI has helped train our managers in behavioral science techniques and is involved in the expansion of training in 2013 to our entire workforce, focusing on peer-to-peer relationships.

Our use of behavioral science is strengthening relationships and building trust among supervisors and our unionized craft employees, who represent about 24,000 of the railroad's approximately 30,000 employees.

"This is allowing us to reach common ground on things like safety, efficiency, and eliminating waste," said Terry Evans, vice president of transportation, our largest department, with about 12,000 employees. "I am extremely excited about the opportunities here. When you talk about 12,000 folks working together with one goal in mind, the company wins, the customer wins, and I think the country wins, because what we do is important to our economy."

Our company's Operations Division Safety and Service Committee visits different work locations every month to meet with employees. Members have received good feedback about the culture shift.

"People really like the emphasis on positive reinforcement, recognizing the things they're doing well, whether it's around safety or around their productivity and work," said David Julian, vice president of safety and environmental. "Our people are the ones who make this company work, and everybody likes to be reinforced on things they're doing right."

IN THIS SECTION

ONE EMPLOYEE MAKING A DIFFERENCE

PIC/NIC INITIATIVE

One Employee Making a Difference

Positive change begins with one employee

Robert Garland, a yardmaster at our Asheville, N.C., terminal, is proof that one employee can make a difference at a large corporation. Senior management at Norfolk Southern credit an email Garland sent to CEO Wick Moorman in late 2010 as being a catalyst in our decision to adopt a behavioral science approach to our operating culture.

Garland, a 10-year employee, sent his email to “Ask Wick,” an internal virtual forum Moorman established on our corporate website to enhance communication with employees. Garland raised questions about the company’s safety processes and noted that other industries have used behavioral science to improve performance.

Moorman and Mark Manion, executive vice president and chief operating officer, discussed Garland’s email as well as their own interests in using behavioral science to improve safety and service. Both executives have talked about Garland’s email at employee gatherings to encourage others to share their ideas for improvements in the workplace.

Since sending his email, Garland has been trained as a facilitator to help train coworkers in the science behind behavior-based safety and performance. He is excited about his role.

“When you’re proactive, you have the opportunity to change your environment; you can have an impact,” Garland said. The real credit, he said, goes to senior executives for their willingness to listen to employees.

“When leadership is sensitive to what the voices from the bottom are saying,” he said, “I think that’s what creates the biggest changes and makes this possible.”

PIC/NIC Initiative

For mechanical employees, working safely is a PIC/NIC

Employees who repair and maintain locomotives and railcars have helped lead efforts to make positive changes in our safety and operating culture.

During 2012, the Mechanical Department piloted use of a tool called PIC/NIC Analysis® a process that helps us better understand the behavior of employees involved in work-related injuries and incidents. Ultimately, the goal is to help the company develop strategies to prevent risky behaviors from occurring.

The PIC/NIC Analysis tool was developed by consultant Aubrey Daniels International. The “P” and the “N” in PIC/NIC stand for positive and negative consequences that occur when a person behaves a certain way. The “I” and the “C” represent whether a person expects the consequences to be immediate and certain versus occurring in the future or uncertain.

“The PIC/NIC Analysis helps you to understand why somebody takes a risk,” said Calvin Cox, a Mechanical Department assistant vice president. “The real benefit is that, once you know why a person took a risk, you can look at what we can change to reinforce correct behavior.”

Safety and service committees at mechanical facilities are using the PIC/NIC process to identify ways to discourage risky behaviors. For example, committee members at an Ohio car shop increased employees’ use of hearing protection by storing earplugs in a more convenient location that didn’t require them to walk across the shop floor to get them.

In PIC/NIC parlance, the committee turned a NIC—a negative immediate consequence of having to take the time to access the protection—into a positive.

“To hear the car men talk about that was pretty rewarding,” said David Price, one of our division managers of mechanical operations. “It’s like you’ve reached another level.”

2012 Employee Safety Performance

Safety is Job No. 1

Our goal at Norfolk Southern is for employees to end the workday the same way they began it—safely. Through training, on-the-job safety briefings, and constant vigilance, our aim is to finish each year without a single injury.

In 2012, our employees helped the company achieve its second-best year ever in safety performance. In a workforce of more than 30,000, our company reported 239 injuries to the Federal Railroad Administration. That equates to an injury ratio of 0.81 injuries per 200,000 employee-hours.

Our operations employees do much of their work outdoors in all kinds of weather and around large, moving pieces of equipment, so they must be aware of their surroundings at all times. The most common reportable injury results from what we term “slips, trips, and falls”—always a potential when employees work on equipment or walk on rock ballast around railroad tracks. Another common reportable injury involves sprains or muscle pulls.

Our safety performance dropped slightly in 2012 compared with 2011, a year in which employees established a record-low injury ratio for the company and the rail industry. Our reportable injuries increased 6 percent in 2012, while the number of people losing work time due to injury rose 7 percent. Regrettably, we also experienced a fatality in 2012, a 52-year-old maintenance-of-way employee whose work truck was struck by a train at a grade-crossing in Virginia.

The number of on-the-job injuries reported during the past five years has been trending downward, dropping every year since 2008 until 2012. Even with the slight increase in 2012 from 2011, we experienced 20 percent fewer injuries in 2012 than were reported in 2008.

LA7

Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.

EMPLOYEE INJURY DATA

	2008	2009	2010	2011	2012
WORK-RELATED FATALITIES	1	0	2	1	1
INJURIES PER 200,000 EMPLOYEE-HOURS	0.94	1.08	0.89	0.75	0.81
NUMBER OF REPORTABLE INJURIES	298	296	251	225	239
PEOPLE WITH RESTRICTED ACTIVITY	1	2	4	2	3
PEOPLE REQUIRING MEDICAL ATTENTION	55	59	52	59	61
PEOPLE WHO LOST TIME DUE TO INJURY	242	241	195	164	175

EMPLOYEES COMMITTED TO SAFETY

Our safety successes stem from outstanding employee performance. Evidence of their commitment to safety can be seen systemwide. Following are a few examples from 2012:

- **Employees at our Enola, Pa., locomotive shop became the first work group to achieve 2 million consecutive employee-hours without a reportable injury.**
- **Employees in six work groups reached 1 million consecutive hours of injury-free service. They are Detroit, Mich., terminal; Virginia Division communications and signals; Harrisburg, Pa., transportation; St. Louis, Mo., mechanical; Sheffield, Ala., mechanical; and Valdosta, Ga., operations.**
- **Many Operations Division work groups finished 2012 without a reportable injury. By department and group, they include:**

MECHANICAL

Locomotive shops at Shaffers Crossing, Va.; Bellevue, Ohio; Enola, Pa.; Roanoke, Va.; and Elkhart, Ind.

ENGINEERING

Communications & signals in our Dearborn, Harrisburg, Virginia, Georgia, Pocahontas, and Central divisions

Communication & signals construction in our Western Region, Eastern Region, Northern Region Group 1, Northern Region Group 2, and Lines West CGA

Maintenance-of-way and structures at the maintenance equipment-south shop and our roadway material yard shop

TRANSPORTATION

Terminals in Kansas City, Mo.; Conway, Pa.; Chattanooga, Tenn.; Birmingham, Ala.; Roanoke, Va., St. Louis, Mo.; Harrisburg, Pa.; Cleveland, Ohio; Charlotte, N.C.; Detroit, Mich.; Allentown, Pa.; New Orleans, La.; Sheffield, Ala.; Toledo, Ohio; and Ashtabula, Ohio

Norfolk Southern Ergo Cup Competition

Efforts to create safer, more efficient work spaces for employees through the use of ergonomics reflect our commitment to being a sustainable employer.

WE GET “ERGONOMICAL”: EMPLOYEES TAKE THE PHYSICAL OUT OF DAILY TASKS

Across Norfolk Southern, employees are using their creativity and experience to create a safer, more efficient work environment.

It's part of our emphasis on ergonomics, an applied science in which workplaces are designed to allow people and equipment to work comfortably and efficiently while reducing potential for injury. Don Robinson, a nationally certified professional ergonomist, joined our railroad in 2011 to help improve operational efficiencies and reduce injury risks.

“Safer methods of work contribute to our sustainability efforts, and the efficiencies gained improve us from a competitive standpoint,” said Robinson, our manager of safety and workplace design.

In 2012, Robinson introduced the “Ergo Cup” competition to Mechanical Department shops, focusing on innovation, teamwork, and problem-solving. Employees from 19 shops developed and submitted ergonomic initiatives that led to productivity and safety improvements. Three certified ergonomists from outside Norfolk Southern judged the competition.

A team of four machinists at our Shaffers Crossing Locomotive Shop, in Roanoke, Va., won the competition. James Snaveley, Aaron Lafon, Donnie Burnette, and Mark Shampine developed a piston compressor tool that makes it safer and easier to reseat pistons in EMD-manufactured locomotives. The tool allows for better body positioning and control, enabling machinists to stand on a running board and use the piston compressor as a lever. It replaced a T-handled tool that required significant force and awkward body positions to push down the piston. We are working with a vendor to manufacture the tool for use across our system.

Second place went to Decatur Car Shop, in Decatur, Ill., for an ergonomically designed welder trolley system, while our Enola Diesel Shop, in Enola, Pa., won third place for its “iron hand” storage cart.

Robinson plans to expand the Ergo Cup to include teams from our transportation and engineering departments. He is working with transportation employees on ergonomic issues they face while performing their jobs, and he is helping engineering staff develop a training video on back care and ergonomics.

GOING NATIONAL WITH ERGONOMICS

In March 2013, for the first time, Norfolk Southern sent an employee team to the National Applied Ergonomics Competition in Dallas.

A piston compression tool designed and built by machinists at our Shaffers Crossing Locomotive Shop competed in the “workplace solutions” category alongside ergonomic projects from companies such as Toyota, Honda, Caterpillar, and Pratt & Whitney.

Safer methods of work contribute to our sustainability efforts, and the efficiencies gained improve us from a competitive standpoint

While our team did not win top honors, we gained national visibility among other FORTUNE 500 companies. Our team's booth featured an exhibit that allowed attendees to test an old, difficult tool on an actual locomotive power assembly and then use the new tool designed by the team. Many ergonomists at the competition appreciated the innovative approach in its design.

"It was great to see our employees discuss and compare diesel engines with Cummins Engine and Toyota and to study the other ergo teams' entries," said Don Robinson, manager of safety and workplace design. "They mentioned to me other ergo improvements they already have planned. This is the ultimate goal."

NS as an Employer

Norfolk Southern recognizes that employees are our most valuable asset, and we provide a supportive work environment. We train employees to work safely and efficiently, offer good pay and benefits, create opportunities for career development and advancement, and provide wellness programs to encourage a healthy and fit workforce.

We are committed to workplace diversity and foster an environment of inclusion and innovation. Our Diversity Council promotes diversity, mutual respect, and professionalism. A variety of employee resource groups, a community volunteer organization, and local chapters of Toastmasters offer opportunities for employees to share experiences and participate in work-related and volunteer projects.

While we function as one company and one team, we recognize that it takes individuals from all lifestyles and backgrounds to generate the creativity and vitality necessary to fulfill our vision to be the safest, most customer-focused transportation company in the world.

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

LA1

LA2

WORKFORCE GENERAL INFORMATION

TOTAL NUMBER OF NS EMPLOYEES	30,416
TOTAL NUMBER OF SENIOR MANAGEMENT	29
PERCENTAGE OF THE WORKFORCE COVERED BY A COLLECTIVE BARGAINING AGREEMENT	83.6%
NUMBER OF NEW HIRES IN 2012	2,488
TOTAL NUMBER OF EMPLOYEES LEAVING EMPLOYMENT IN 2012	2,144
BREAKDOWN OF ENTIRE WORKFORCE BY COUNTRY: U.S. CANADA	30,404 12

ALL EMPLOYEES BY STATUS

EMPLOYEE STATUS	TOTAL %	MALE TOTAL	MALE %	FEMALE TOTAL	FEMALE %	TOTAL
AGREEMENT	83.6%	24,289	95.5%	1,150	4.5%	25,439
NON-AGREEMENT	16.3%	4,016	81.2%	932	18.8%	4,948
SENIOR MANAGEMENT	0.1%	26	89.7%	3	10.3%	29

EMPLOYEES LEAVING EMPLOYMENT BY STATE OF EMPLOYMENT

STATE	%	NUMBER OF EMPLOYEES
AL	3.5%	74
DE	0.6%	12
FL	0.4%	9
GA	13.7%	293
IA	0.0%	1
IL	4.4%	94
IN	5.4%	115
KY	2.0%	43
LA	0.1%	2
MD	1.1%	23
MI	1.7%	37
MO	1.4%	30
MS	0.2%	5
NC	3.2%	69
NJ	0.8%	18
NY	1.8%	38
OH	10.3%	221
PA	19.7%	422
SC	1.7%	37
TN	4.0%	85
VA	11.8%	252
WV	2.6%	55
XX - REGIONAL	9.7%	209
TOTAL EMPLOYEES		2,144

IN THIS SECTION

A GOOD EMPLOYER

EMPLOYEE BENEFITS

A Good Employer

You want to be a railroader?

To learn more about the railroad's skilled craft jobs and to watch a video about what it takes to be a Norfolk Southern conductor, go to www.nscorp.com.

A FORTUNE 300 CAREER

Norfolk Southern contributes to the economic vitality of the communities we serve by offering good-paying jobs and opportunities for careers at a FORTUNE 300 company.

In 2012, we hired more than 2,300 employees in a variety of jobs critical to our operations. A majority of the new hires were craft employees. The top five positions by number of employees hired were: conductor trainees, track laborers, signal trainees, carmen, and firemen/oilers. The top five states for new hires were Georgia, Virginia, Pennsylvania, Ohio, and Illinois.

About 82 percent of our railroad employees are covered by collective bargaining agreements with various labor unions. Our unionized craft positions are well-paying, stable jobs that don't require a college education. People hired as conductor trainees and track laborers come from many backgrounds. Pay for a conductor trainee starts at around \$40,000, not counting benefits, and rises to between \$50,000 and \$75,000 annually as they become conductors and gain certification as train engineers. The other craft positions pay \$50,000 to \$70,000 a year, not including medical and other benefits.

These jobs help provide for families and strengthen local economies. In an effort to attract the most talented employees, the railroad's Diversity Council sponsors Thoroughbred Recruiting Outreach Teams that look for recruiting opportunities.

NEW HIRES GET STARTED ON THE RIGHT FOOT

A cornerstone of Norfolk Southern operations is ensuring that new employees are well-trained and equipped to work safely and efficiently. A state-of-the-art training center makes that possible.

Our emphasis on training has become more important than ever in recent years, as employees from the baby boomer generation retire. It's essential that the employees we're hiring to replace them are equipped with the skills and knowledge needed to meet rail transportation needs in the 21st century. Our McDonough Training Center, located south of Atlanta, provides that training through real-world railroading experience in a controlled environment.

Training classes at McDonough, ranging from three to eight weeks, introduce new employees to all aspects of the railroad. Led by a 25-member staff, classes include hands-on, computer, and simulation training. In addition, employees gain knowledge by using the center's two miles of railroad track and siding, four yard tracks, working railcar and locomotive repair shops, and welding lab.

In 2012, the center provided training for 3,508 employees, including 866 newly hired conductors and 494 locomotive engineers.

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

LA1

LA2

NEW HIRES BY STATE OF EMPLOYMENT

STATE	%	NUMBER OF EMPLOYEES
AL	3.5%	92
DE	0.4%	12
FL	0.4%	11
GA	14.1%	405
IA	0.1%	2
IL	6.4%	165
IN	7.3%	154
KY	2.0%	45
LA	0.2%	3
MD	0.7%	20
MI	1.4%	33
MO	1.2%	33
MS	0.1%	1
NC	1.9%	43
NJ	0.6%	14
NY	1.3%	37
OH	9.1%	223
PA	17.9%	419
SC	1.6%	36
TN	4.8%	104
VA	8.9%	256
WV	0.8%	19
XX - REGIONAL	15.7%	361
TOTAL NEW HIRES		2,488

WE PROMOTE DIVERSITY

Norfolk Southern makes a concerted effort to recruit a diverse workforce and to be inclusive in the way we operate our business.

We define diversity as the collective mixture of similarities and differences that affect our workforce, workplace, and marketplace. We try to leverage diversity by ensuring that all of our employees' unique talents and experiences are tapped, not only to help them develop their full potential but also to improve customer service and advance the company's business goals.

Norfolk Southern formed a Diversity Council to help identify ways to recognize, cultivate, and make use of employee talents. The council, made up of a cross section of employees, also assists in developing and implementing initiatives to promote diversity, mutual respect, and professionalism across our operating network. It aims to foster a climate of fairness, mutual respect, and professionalism for all employees.

In recent years we also have helped form employee resource groups to promote diversity and inclusion while building teamwork and connections across departments and work locations.

WiNS: In 2004 we formed WiNS, an organization that offers female employees an additional way to network, develop professionally, and gain leadership skills. Membership in WiNS is open to all employees. By the end of 2012, the group had more than 1,430 members. We believe nurturing the talents of our women employees is one more way for Norfolk Southern to gain a competitive edge in the marketplace.

YoungNS: In 2009 we introduced YoungNS, a network aimed at developing the young and short-tenured professionals in our workforce. YoungNS seeks to strengthen the ranks of our management talent pool and improve retention through mentoring, education, professional development, and networking. The group was formed at our Norfolk headquarters and had 225 members of all ages and years-of-service by early 2013. In 2011, YoungNS chapters expanded to Atlanta and Roanoke, with 475 and more than 360 members, respectively, at the end of 2012.

VeteraNS: In 2012, we formed VeteraNS in Atlanta. VeteraNS aids in educating, developing, and connecting the Norfolk Southern community with military persons both retired and active.

Norfolk Southern follows four principles of diversity. We believe diversity:

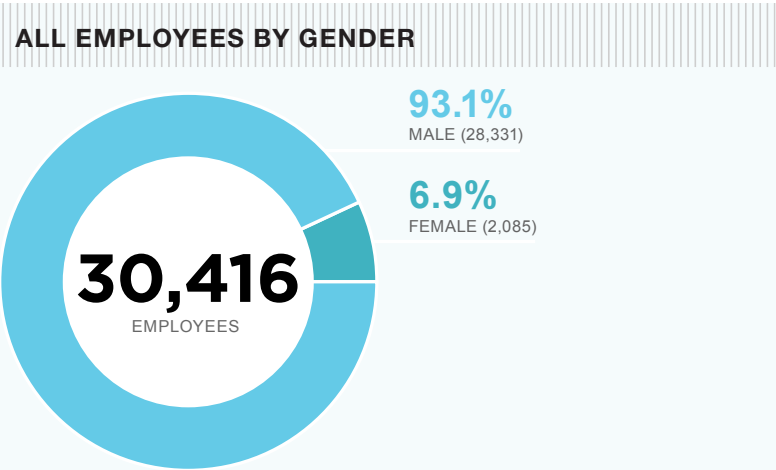
- Means inclusion and respect for others
- Works best when everyone participates
- Fosters creativity and innovation
- Embodies a critical business asset

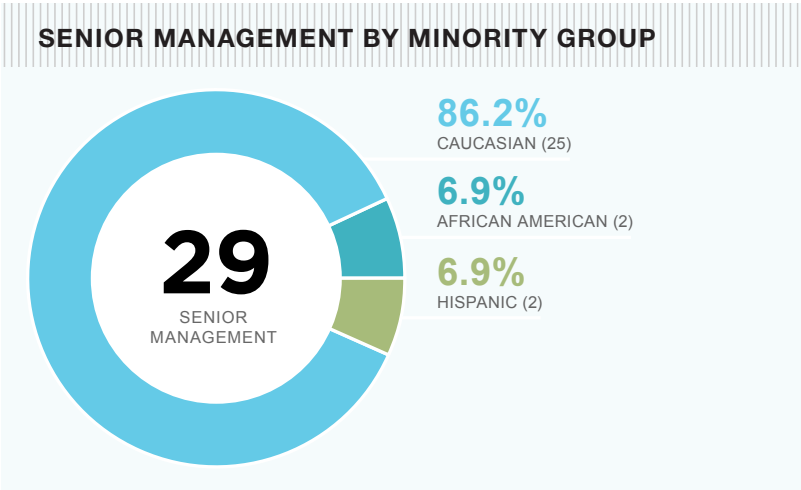
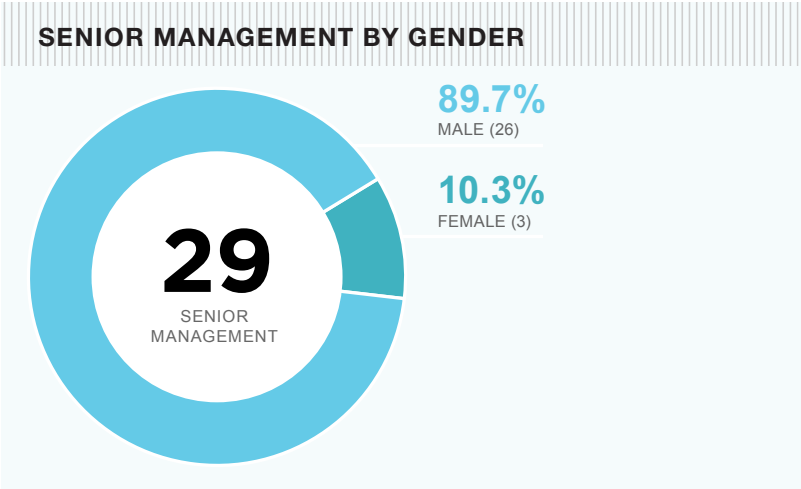
G.I. Jobs magazine named Norfolk Southern among the nation’s Top 100 Military Friendly Employers

CEO WICK MOORMAN ON DIVERSITY:

Some people think of diversity as having to do only with race, gender, religion, and nationality. But it goes far beyond that to define the perspectives that we all bring to our jobs. At Norfolk Southern, diversity impacts not just our workforce, but also our workplace and marketplace. Increasingly, our company performs on a world stage, and in this highly competitive environment we need to keep a broad range of opinions and outlooks if we are to deliver for our shareholders, shippers, and employees.

What I ask of everyone at Norfolk Southern in regard to diversity and inclusion is simple: As you go about your daily activities, ask yourself how you can use diversity to achieve better business outcomes. Keep inclusion in mind as you form problem-solving teams, and use it as a tool as you identify opportunities, develop objectives, and execute our business plans.





NS BOARD OF DIRECTORS DEMOGRAPHICS						
	BOARD OF DIRECTORS	AUDIT	COMPENSATION	EXECUTIVE	FINANCE	GOVERNANCE & NOMINATING
AGES:						
UNDER 30	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
30-50	7.7%	16.7%	0.0%	0.0%	14.3%	0.0%
50+	92.3%	83.3%	100.0%	100.0%	85.7%	100.0%
GENDER:						
FEMALE	7.7%	16.7%	0.0%	0.0%	0.0%	20.0%
MALE	92.3%	83.3%	100.0%	100.0%	100.0%	80.0%
MINORITY GROUPS:						
BLACK	7.7%	16.7%	0.0%	0.0%	0.0%	20.0%
CAUCASIAN	92.3%	83.3%	100.0%	100.0%	100.0%	80.0%

NS BOARD OF DIRECTORS DEMOGRAPHICS

	MALE	FEMALE	CAUCASIAN	BLACK	HISPANIC	OTHER MINORITIES	TOTAL
BOARD OF DIRECTORS	12	1	12	1	0	0	13
GOVERNANCE AND NOMINATING COMMITTEE	4	1	4	1	0	0	5
AUDIT COMMITTEE	5	1	5	1	0	0	6
COMPENSATION COMMITTEE	6	0	6	0	0	0	6
EXECUTIVE COMMITTEE	5	0	5	0	0	0	5
FINANCE COMMITTEE	7	0	7	0	0	0	7

AN EQUAL OPPORTUNITY EMPLOYER

Our company offers employment, training, remuneration, advancement, and all other privileges of employment on the basis of qualification and performance, regardless of race, religion, color, national origin, gender, age, status as a covered veteran, sexual orientation, the presence of a disability, genetic information, or any other legally protected status.

HONORING OUR MILITARY VETERANS

Norfolk Southern recognizes the valuable skills and life experiences that military veterans provide to railroad operations. In 2012, as part of our continued support of hiring veterans, we commissioned a one-of-a-kind "Veterans Locomotive," a working engine that has moved freight across our system since its unveiling on Veterans Day.

Eighteen employees who served in all branches of the armed forces chose the locomotive's design, which features a red, white, and blue paint scheme and a yellow ribbon with the message "Honoring Our Veterans." The locomotive serves as a visual thank you to those serving and a recruitment tool for military members transitioning to civilian life.

A GOOD FIT WITH OUR RAILROAD: As of 2012, approximately 14 percent of the company's workforce has served in the military, including the approximately 200 veterans we hired during the year to support the federal government's Joining Forces Initiative.

"At Norfolk Southern we believe that hiring veterans is not only the right thing to do, it's the smart thing to do," said Thomas Winter, director of planning and staffing. "With their superb training, technical skills, leadership abilities, and experience working under all types of conditions, veterans bring valuable skills to the railroad industry."

To recruit veterans, representatives from our Human Resources Department attend military hiring conferences and military career-transition programs on bases. In 2012, we launched an online site that allows veterans to search for railroad employment opportunities that match their military skill sets.

We offer other support as well: If veterans are called to active duty through the Reserves or National Guard, they can fulfill their military duties with assurance of knowing that the railroad jobs will be waiting when they return. To further assist, the company provides income supplements and continues existing health and life insurance coverage during the Reserve duty, offering benefits beyond those required by law.

In addition to unveiling a patriotic locomotive on Veterans Day 2012, Norfolk Southern released a video featuring seven veterans who embarked on second careers at our railroad. [Click here to view photos of the locomotive and the video, "Two Careers. One Mission. Let's Roll."](#)

RECOGNITION

A "most valuable" employer

CivilianJobs.com named Norfolk Southern to its 2012 list of Most Valuable Employers for the Military®. Our railroad was among 45 companies recognized for their commitment to hiring veterans.

CivilianJobs.com helps job seekers with military experience to identify top employers for careers in the private sector. The organization's Most Valuable Employers recognition is open to all U.S.-based companies. Those who made the list were selected based on surveys in which employers outlined their 2012 recruiting, training, and retention plans for military service members and veterans.

A 'military friendly' company

In its 10th annual list, *G.I. Jobs* magazine named Norfolk Southern among the Top 100 Military Friendly Employers®. The magazine's list for 2013 was announced in November 2012, recognizing companies with the best military recruiting and hiring practices.

Norfolk Southern made its sixth appearance on the list, ranked at No. 32. The list represents the top 2 percent of more than 5,000 eligible companies with annual revenues exceeding \$500 million. Criteria include strength of a company's military recruiting efforts, percentage of new hires with prior military service, retention programs, and company policies toward National Guard and Reserve service.

Employee Benefits

Norfolk Southern wants employees to be successful and have room to grow and develop in their careers.

We like to promote from within when possible. Wick Moorman, our current CEO, for example, joined the railroad right out of college in the 1970s as an Engineering Department management trainee and moved up the career ladder. Our training and skill development programs are designed to provide “just in time” training that enables employees to grow in their current positions and prepare them for positions with more responsibility.

“We want employees to have the tools and training they need to reach their full potential, whether that means gaining skills they need to be the best they can be in their current position or to transition into jobs of higher responsibility,” said Bill Faulhaber, our director of employee development.

Here are key programs and training opportunities we offer:

MANAGEMENT TRAINEE PROGRAM: This program is geared toward recent college graduates and potential future management leaders of the company. During the 12-month program, trainees receive classroom instruction and spend time with mentors in various departments, allowing them to build networks and gain a common core of knowledge. Key topics include technology, green initiatives, and the importance of civic involvement in the communities we serve.

OPERATIONS SUPERVISOR TRAINING PROGRAM: The OST program has a two-fold purpose: to provide a path for craft employees to move into supervisory positions and to recruit external people who have industrial management experience but often not at railroads. OST fosters career advancement for top-performing operations employees and enhances workplace diversity by bringing in outside talent, including military veterans.

THOROUGHbred SCHOOL: Known as T-School, this program gives management employees an opportunity to network and gain a broader understanding of the issues Norfolk Southern faces and the goals we are trying to achieve. The weeklong session provides a forum for exchanging ideas and promoting higher levels of cooperation and communication.

ONLINE TRAINING: A substantial suite of self-directed online training opportunities is available. Management employees can further develop management and leadership skills through more than 30 online courses from the Harvard ManageMentor program. All employees have access to more than 150 SkillSoft e-learning courses that help develop various skills, from business writing to organizing and running meetings.

EDUCATION ASSISTANCE: Full-time employees with at least six months of service can receive education assistance to develop skills to become more productive and valuable. The company provides up to \$5,250 a year for tuition, fees, and books needed to obtain business-related associate or bachelor's degrees or for college courses related to an employee's job or future job aspirations.

EXECUTIVE DEVELOPMENT PROGRAM: We sponsor management and executive development programs such as CrossTracks and the Executive Development Program at the University of Virginia's Darden School of Business. These programs aim to develop analytical business skills, leadership skills, and an enterprise view.

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

EC3

LA8

LA11

WellINS – KEEPING OUR EMPLOYEES HEALTHY

Norfolk Southern believes employees have the power to influence not only their own health and wellness, but to inspire their families, friends, and coworkers to make healthy choices. That power has grown in the five years since we introduced WellINS, a health and fitness program that encourages employees to get regular medical screenings, become active, quit tobacco use, and make nutritious food choices.

In 2012, the American Heart Association recognized Norfolk Southern as a Platinum Fit-Friendly Company and presented us with its Worksite Innovation Award for encouraging physical activity and health in the workplace. In addition, in early 2013, the Atlanta Business Chronicle named Norfolk Southern Atlanta's third-healthiest employer in the Large Company category.

In July 2012, we bolstered wellness activities by eliminating the fee employees once paid to participate in Virgin HealthMiles, a program that outfits participants with an accelerometer that counts steps. Employees can earn up to \$500 for miles walked and HealthMiles earned during the year. HealthMiles are earned when employees log activities at local HealthZone stations, challenge other participants to walking competitions, and commit to stopping tobacco use. After the fee was eliminated, participation in the program jumped to more than 10,000 employees, a third of our workforce, from 1,700.

Norfolk Southern also pays 50 percent of the cost of Weight Watchers programs for employees and their spouses. To help employees achieve their weight loss and healthy lifestyle goals, we began offering on-site yoga and abdominal classes and installed locker rooms and showers at our Norfolk, Atlanta, and Roanoke offices in 2012. Our training center in McDonough, Ga., outside Atlanta has a fitness room with a treadmill and elliptical trainer.

Our PowerTrain program encourages employees to form teams of at least 10 colleagues and compete in physical activities that benefit disease-based charities. The company in turn donates \$1,000 to the charities. In 2012, 25 PowerTrain teams from across the railroad participated in activities benefiting such organizations as the March of Dimes, the American Diabetes Foundation, the Alzheimer's Association, Autism Speaks, the MS (Multiple Sclerosis) Society, and the American Cancer Society.

DARS GIVES EMPLOYEES A HELPING HAND

Safety and productivity are compromised when employees are struggling with a chemical-dependency problem. To assist, Norfolk Southern offers Drug and Alcohol Rehabilitation Services, or DARS, a voluntary program available as a benefit for employees and their family members.

In 2012, 846 employees and family members received DARS assistance, 337 of which were new cases. Along with helping employees and maintaining our commitment to a drug- and alcohol-free workplace, DARS has another benefit: For every worker retained through the program, our company saves at least \$50,000 in hiring and training costs.

"We understand our people are a valuable commodity and deserve a chance to receive help," said Jon McNally, manager of DARS. "They're much more productive, and it's like having a brand new employee who's also very loyal."

Ten DARS counselors and the DARS manager are available to meet with employees and families and refer them for additional treatment. In 2013, we introduced a new peer-to-peer initiative to educate employees about the dangers of substance abuse, its impact on the workplace, and resources for getting help.

The federal government requires railroads to randomly test certain operations employees, including train and engine crews, for alcohol and drugs while on the job. It also mandates testing after major train accidents and certain rules violations. Typically, less than 1 percent of Norfolk Southern employees test positive.

COMPREHENSIVE BENEFITS

Norfolk Southern offers a comprehensive benefits package for all employees to help them care for their families and plan for their future.

About 82 percent of our workforce is made up of unionized employees, and we and other U.S. Class 1 railroads offer a benefits package arrived at through national collective bargaining agreements with various employee unions.

Our company provides a benefits package that offers a range of options for employees who are not represented by a union.

RAILROAD RETIREMENT

Railroad employees are covered by the Railroad Retirement and Railroad Unemployment Insurance Act, which provides retirement and unemployment benefits to workers and families. Employees and employers in the rail industry pay Railroad Retirement taxes instead of FICA taxes under Social Security. While payroll taxes for Railroad Retirement are slightly higher, benefit payouts at retirement are significantly greater than those of Social Security.

RECOGNITION

An adoption-friendly company

The Dave Thomas Foundation for Adoption ranked Norfolk Southern No. 4 among U.S. transportation and automotive sector companies on its 2012 list of Best Adoption-Friendly Workplaces. We were the only railroad on the Top 5 sector list.

The foundation, a national nonprofit public charity dedicated to increasing adoptions, releases an annual list of employers with the best adoption-related benefits. Rankings are based on the maximum amounts of financial reimbursement and paid leave available to employees who adopt.

Norfolk Southern in the Community

Big company, big heart

Beyond our office buildings, mechanical shops, and rail yards, thousands of employees volunteer in their communities. Many sport the distinctive red, white, and blue T-shirt of our formal volunteer program, the Thoroughbred Volunteers.

Our company encourages employees to give back to their communities, and many contribute time, talent, and treasure to programs that enrich their neighborhoods and advance the company's sustainability goals. An informal company survey in 2012 offers a glimpse of their contribution: The nearly 400 employees who filled out the survey reported volunteering more than 82,000 hours of their time for a host of organizations representing community, civic, culture and arts, education, environmental, health and human services, and business and economic development interests.

From senior executives who trade in suits and ties for work shirts and jeans to field employees who spend a day off working on a community project, these volunteers are the heart and soul of Norfolk Southern.

"Our company has a firm belief that we need to give back to the communities in which we live and work," said Cindy Earhart, executive vice president of administration and executive sponsor of the Thoroughbred Executive Volunteer Council. "You just know deep down that it's a good thing for us to do."

IN THIS SECTION

COMMUNITY CONNECTIONS

NORFOLK SOUTHERN FOUNDATION

PARTNER IN PASSENGER RAIL

COMMUNITY SAFETY

COMMUNICATING WITH COMMUNITIES

Community Connections

Our volunteers make a difference

Our formal volunteer program, the Thoroughbred Volunteers, has chapters at four of our largest sites of employment—Atlanta, Norfolk, Va., Roanoke, Va., and Harrisburg, Pa.

In 2012, Thoroughbred Volunteers donated more than 3,200 hours of service. They painted homes for families in need; picked up litter along the Chesapeake Bay, the Roanoke Valley, and the Appalachian Trail; tutored elementary school students; packaged medical supplies for impoverished countries; collected school supplies for needy children; and collected and sorted donated canned food items.

The Atlanta Thoroughbred Volunteers collected more than 1,000 pounds of food and sorted 7,544 pounds of meat for distribution through the Atlanta Community Food Bank and also gathered 40 boxes of school supplies for the Boys & Girls Club of Atlanta. In addition, the volunteers read to students at an elementary school near their office through the Everybody Wins! Lunchtime Reading program and helped clean up DeKalb Memorial Park during the annual Hands On Atlanta Day.

“It’s a great way to get to know other people in the company and do a good thing at the same time,” said Stacia Minton, who chaired the Atlanta group for the past five years. “You can see right away that you’re helping people.”

In Roanoke, Thoroughbred Volunteers, along with families and friends, collected 400 pounds of food and sorted 45,600 pounds of food for Feeding America; joined other residents for Clean the Valley Days; helped Rebuilding Together repair homes; and decorated the O. Winston Link Museum for Christmas.

In Norfolk, Thoroughbred Volunteers cheered Special Olympics athletes, gathered and sorted canned food, and read to at-risk children living in shelters. The group also collected more than 550 pounds of nonperishable food for the Foodbank of Southeastern Virginia.

In Harrisburg, Thoroughbred Volunteers collected food for the Central Pennsylvania Food Drive, gathered toys for Toys for Tots, and organized toiletries for homeless veterans through Totes of Hope.

THIS HART ‘REACHES’ OUT TO OTHERS

Helen Hart has a demanding job as Norfolk Southern general solicitor, and she has her hands full at home raising two young children with her husband. Although her time is limited, she believes it is important to make time to volunteer in the community.

“I personally have been given so much in life, and I have enough time and resources to share with others who don’t necessarily have the same opportunities,” she said. “It is valuable not only to them, but also to me because I enjoy sharing and helping others.”

In 2012, Hart earned recognition for her support of REACH, a small nonprofit organization in Southeastern Virginia that promotes literacy efforts for at-risk children and children living in homeless shelters. REACH stands for Reading Enriches All Children. Hart received the organization’s Kristin K. Hildum award, given to a volunteer whose efforts go above and beyond the ordinary. Local television station WAVY-TV 10 picked her for its “10 Who Care” award for her work

with REACH. The WAVY award was given to 10 people in the community who perform great public service with little to no recognition.

Hart got involved with REACH in 2010 as a member of the railroad's Thoroughbred Volunteers Council, launching an initiative that got coworkers involved in REACH's homeless shelter reading program. Hart now serves on REACH's board of directors as vice president of programs and helps oversee the organization's strategic plan.

Hart believes everyone at Norfolk Southern has a responsibility to volunteer. "We are lucky enough to be fully employed and have resources that many others don't," she said. "It takes the efforts of all of us to help people in our communities and to help make our communities better places to live."

Norfolk Southern Foundation

Our corporate foundation aims to meet community needs

NORFOLK SOUTHERN FOUNDATION PRIORITIES

To help ensure that:

- Our region’s children receive first-class educational opportunities that make them productive and valued citizens and employees in the future
- Our communities can provide basic human services—food, shelter, and medical care—to those in need
- Our communities can offer residents access to cultural opportunities that make life more enjoyable
- Our communities can provide residential and work environments that are safe, attractive, and desirable

As a major employer in communities large and small throughout the eastern U.S., Norfolk Southern takes seriously its role as corporate citizen. We are committed to providing human and financial resources to help improve these communities for the benefit of our employees and our neighbors.

Our Norfolk Southern Foundation helps fulfill that commitment. Since its establishment in 1983, the foundation has contributed nearly \$131 million to thousands of charitable organizations across our operating territory. In the last five years alone, it has provided more than \$29.6 million.

Grants total
\$10,699,883

Matching Gifts
\$1,656,537

NS FOUNDATION, CORPORATE, AND BUSINESS 2012 GRANTS

COMMUNITY RELATIONS	
UNITED WAY 80 organizations	\$1,499,990
OTHER HEALTH & HUMAN SERVICES 98 organizations	\$1,236,100
TOTAL	\$2,736,090
CULTURE & ARTS 60 organizations	\$1,628,625
EDUCATION 76 organizations	\$1,398,445
CIVIC & COMMUNITY 122 organizations	\$749,620
ENVIRONMENT & ECOLOGY 14 organizations	\$216,500
OTHER 67 organizations	\$2,314,266
MATCHING GIFTS* 1,352 gifts to 525 organizations; 507 individual donors	
ARTS & CULTURE 670 gifts to 230 institutions	\$630,527
EDUCATION 634 gifts to 273 institutions	\$1,005,956
ENVIRONMENT 48 gifts to 22 institutions	\$19,854
TOTAL	\$1,656,537

*These gifts matched contributions of employees and retired employees.

In 2012, the foundation donated \$6.98 million overall in cash grants, a nearly 13 percent increase over 2011. The foundation continued its support of education, arts and cultural programs, and United Way organizations in locations where our employees live and work. Based on community needs, the foundation in 2012 expanded funding for two newer priorities: health and human service organizations—primarily independent free clinics, food banks, and homeless shelters—and environmental groups.

Along with corporate donations, the foundation provided \$2.73 million for health and human service needs, an increase of nearly 3 percent over 2011. The funding went to 80 United Way organizations and 98 other human service groups. Among groups receiving the largest grants were food banks, such as the Foodbank of Southeastern Virginia, the Atlanta Community Food Bank, and Feeding America Southwest Virginia; ForKids Inc., which helps homeless families with children become self-sufficient; and Children's Hospital of the King's Daughters, which is dedicated to children's health and well-being.

As Norfolk Southern strives to mitigate environmental impacts from our business operations, the foundation has bolstered those efforts by increasing donations to groups focused on preserving and restoring natural resources. Last year, the foundation and corporation awarded \$216,500 to environmental organizations, a nearly 19 percent increase over 2011.

Environmental groups receiving funding included The Nature Conservancy of Virginia, which works to protect ecologically important lands and waters in Virginia; the Elizabeth River Project, dedicated to restoring the river's environmental qualities; The American Chestnut Foundation, whose mission is to reforest former coal mines in the Appalachian regions of the eastern U.S.; The Longleaf Alliance Inc., which is working to preserve and expand longleaf pine forests across the Southeast; the Chesapeake Bay Foundation, whose mission is to Save the Bay™, the nation's largest estuary; and the Powell River Project, a research and education program run by Virginia Tech that focuses on converting former coal mines into other beneficial uses.

The foundation and corporation distributed a total of \$180,000 across all of the railroad's 11 operating divisions through a local discretionary grant program. The funds went to community volunteer fire departments, rescue squads, and police departments; arts, cultural, and historic organizations; civic, community relations, and human services organizations; and educational institutions.

To support the company's mission to enhance workplace diversity, the foundation and corporation awarded \$305,580 to organizations that support higher education for minorities and women, more productive community relations, and services for underserved populations in our operating territory. In addition, the foundation and corporation gave \$164,000 in grants to colleges, universities, and scholarship organizations to help women and minorities obtain a college education.

A HELPING HAND AFTER STORMS

In times of disaster, the Norfolk Southern Foundation does what it can to help provide relief to affected communities. During 2012, the foundation provided disaster assistance to the American Red Cross to help recovery efforts after three major storms in our operating territory.

After severe storms in West Virginia, the foundation provided \$50,000 in emergency funding.

After Hurricane Isaac struck the Gulf Coast, the foundation contributed \$100,000 in disaster relief that was split between Louisiana and Mississippi to help residents in those two states recover.

After Hurricane Sandy brought severe wind and flood damage to the mid-Atlantic and Northeast, the foundation contributed \$100,000 to assist communities in their recovery efforts.

Partner in Passenger Rail

Norfolk Southern recognizes the public interest in promoting passenger rail as a way to ease highway congestion and reduce greenhouse gas emissions.

As a good corporate citizen, we have worked with communities, states, and operators to allow passenger trains to operate on our network in areas where it can be done safely and without jeopardizing our current and future business needs.

A PARTNER IN PASSENGER RAIL PROJECTS

On a cold, windy day in December 2012, Amtrak passenger rail service returned to Norfolk, Va., after a 35-year absence. It could not have happened without Norfolk Southern.

Through a partnership with Virginia, we are allowing Amtrak trains to operate over a 77-mile stretch of double-track freight line between Norfolk and Petersburg, a link that enables passengers to ride round-trip from Norfolk to Washington and Boston.

The line is part of our Heartland Corridor, which connects Virginia port terminals to Midwest markets; our trains move international intermodal freight, export coal, and general merchandise over it. As part of the agreement, Virginia invested \$114 million in infrastructure improvements to ensure that the faster Amtrak trains could operate safely and not interfere with freight traffic. Employees in our Engineering Department helped plan, design, construct, and install the improvements.

We believe the agreement is a model of how businesses and government can partner to generate public and private benefits: It addresses a growing public demand for expanded passenger rail while maintaining freight rail's ability to serve shippers—in this case at one of the East Coast's largest ports. The project helps make the state port more competitive and provides passenger rail service that benefits residents, military personnel at the world's largest naval base, and the business community.

In 2009, after President Obama's administration and Congress broadened support for high-speed passenger rail, Norfolk Southern created a new position within our strategic planning group to manage the railroad's work on passenger rail projects. Since then, we have reached more agreements with states and localities on passenger rail projects than any other Class 1 railroad. During 2012, in addition to the Virginia project, we completed passenger rail agreements with the states of North Carolina, Illinois, and Michigan.

By the end of 2012, passenger rail service was operating on about 2,000 miles of Norfolk Southern rail lines. Amtrak trains account for most of this activity, but we also interact with intercity commuter rail service on our system. Each new passenger rail proposal must be evaluated not only on how it would affect current freight traffic, but also on NS' ability to grow future business.

A GOOD PASSENGER RAIL PROJECT

While we support passenger rail programs, we must ensure that they are implemented in a way that sustains future freight traffic. We follow five guiding principles when evaluating the compatibility of passenger rail on our lines. Passenger rail must:

- **Provide safe operations for freight and passenger trains and the communities they serve**
- **Be transparent to freight operations, meaning sufficient infrastructure must be available for both passenger and freight trains to operate without delays and to for business growth**
- **Provide fair value for the use of Norfolk Southern assets**
- **Offer full liability protection**
- **Operate without subsidy from Norfolk Southern**

Community Safety

Our railroad transports products that are essential to the economy but can be harmful if mishandled, such as crude oil and chemicals that manufacturers turn into commercial and household products.

Rail is a safe way to transport these goods: According to data compiled by the Association of American Railroads, 99.9977 percent of all hazardous material rail shipments reach their destination without a release caused by a train accident.

While we and customers who ship hazardous materials on our rail network share a steadfast commitment to safety, accidents can happen. In recognition of that, we work hard to ensure that our employees and the communities we serve know what to do to minimize damage and personal injury if an incident occurs.

TRANSCAER® is a voluntary national outreach effort that helps communities prepare for and respond to possible hazardous-material transportation incidents. Members include volunteer industry representatives from transportation companies, including Norfolk Southern, as well as chemical manufacturing, distribution, and emergency response companies.

WE HELP COMMUNITIES PREPARE

To help communities prepare for potential incidents involving hazardous materials, Norfolk Southern participates in the Transportation Community Awareness and Emergency Response Program known as TRANSCAER®.

Working with TRANSCAER, we held 97 rail-accident-response training events in 88 cities across 16 states during 2012. More than 5,000 emergency responders, including 1,141 local fire and police departments, participated in classroom and hands-on training sessions, tabletop simulations, and field drills. These sessions, representing more than 19,000 hours of training, provided a unique opportunity to learn about rail tank cars and the movement of chemicals by rail.

Among other events in 2012, our employees presented training at the Delaware Responders Conference, the Midwest Hazardous Material Conference, the South Carolina State Fire Conference, the Indiana Emergency Response Conference, and the Virginia HazMat Conference.

Our TRANSCAER efforts also include distribution of Norfolk Southern's Railroad Emergency Response Planning Guide, a reference source that supplements our training programs. It includes railroad phone numbers, important notification procedures, hazmat identification, and training opportunities.

"Norfolk Southern places great importance on these proactive efforts to enhance the preparedness of communities and their emergency management agencies," said Richard Russell, our system director of environmental protection. "In the unlikely event of an incident, TRANSCAER training programs ensure that shared knowledge, mutual areas of expertise, and a wealth of resources can be leveraged to protect the communities we serve."

19,000 hours

Provided more than
19,000 hours of rail
accident response training
to more than 5,000
emergency responders

FINANCIAL SUPPORT FOR RESPONDERS

In 2012, the Norfolk Southern Foundation, our charitable giving arm, contributed more than \$97,500 in grants to 81 local communities and emergency response organizations to help them purchase hazmat gear and equipment. We also provided 10 scholarships valued at \$16,400 to emergency responders across our system to attend the Association of American Railroad's Security and Emergency Response Training Center in Pueblo, Colo.

WE TRANSPORT CHEMICALS SAFELY

Our railroad transports various industrial chemicals and petroleum products regulated as hazardous materials. In fact, federal law mandates that our railroad, as a common carrier, transport hazardous materials, including commodities described as toxic inhalation hazards, or TIH, such as chlorine gas.

In 2012, we transported 13,528 shipments of TIH materials, compared with 14,751 in 2011 and 15,743 in 2010. In addition to TIH shipments, our railroad moved 443,779 loads of other freight regulated as hazardous materials.

Norfolk Southern did not experience a single accident-related release of TIH material in 2012. In the transport of other hazardous materials, we reported four accidental releases. Two of these releases involved only one railcar each and did not result in major incidents. The other two derailments involved railcars in fires, one containing ethanol and one with molten sulfur.

WE SET THE STANDARD FOR TRAINING

Norfolk Southern worked with the National Transit Institute at Rutgers University to develop a four-module national training program for transporting hazardous materials. We also have partnered with the federal Transportation Security Administration to develop other industry training programs.

All employees who directly affect the safety of hazardous material transport receive security awareness training that is integrated into recurring hazardous material training and recertification programs. Select employees who have specific security responsibilities receive more in-depth security training.

We comply with federal requirements for hazardous material training. We provide annual training in awareness, safety, and security for train and engine crews that transport hazardous materials, going beyond federal regulations that require such training every three years.

WE PROMOTE RAIL SAFETY

Working with industry partner BNSF Railway, Norfolk Southern in early 2012 introduced a new "Protect the Line" program that makes it easier for communities, businesses, and individuals to report public safety or security issues. The program significantly expanded BNSF's Citizens for Rail Security initiative.

The Web-based resource allows observers to report suspicious activity on railroad properties relating to track obstructions, trespassing, vandalism, suspicious items and vehicles, and terrorism.

The public can quickly access Protect the Line at www.protecttheline.com.

WE PROVIDE LINES OF COMMUNICATION

To ensure the rapid flow of information, we provide emergency responders with immediate access to hazardous-materials information through a high-speed VPN Internet connection using Operation Respond Emergency Information System (OREIS) software. In the event of a rail incident involving Norfolk Southern, qualified pre-registered emergency responders can use the OREIS system to identify the type of hazardous materials being transported in the freight cars.

This Internet link with OREIS allows emergency officials to independently access information faster than ever before. We provide emergency responders with information about OREIS at every training session we present.

WE PARTNER WITH GOVERNMENT AGENCIES

Our railroad partners with numerous federal and state agencies to ensure rail security. Among them are the U.S. Department of Homeland Security, the Transportation Security Administration, the FBI, the Federal Railroad Administration, the U.S. Coast Guard, U.S. Customs and Border Patrol, and various state Homeland Security offices and fusion centers.

A Norfolk Southern police special-agent-in-charge, under the auspices of the Association of American Railroads, serves on the National Joint Terrorism Task Force in Washington and acts as liaison between the rail industry and rail-oriented departments of federal agencies. This arrangement improves the flow of security information among the rail industry, law enforcement, and senior federal government officials. Our presence has fostered a strong working relationship between the North American freight and passenger rail industry and the FBI.

We work closely with the U.S. Coast Guard to develop security plans at the six port facilities we manage along the East Coast, Great Lakes, and Ohio River. Norfolk Southern employees who work at security-controlled ports have been issued TSA Transportation Worker Identification Credentials. We also are a member of the Customs-Trade Partnership Against Terrorism program, working with U.S. Customs officials to protect the integrity of freight shipments on our rail system.

WE SUPPORT OUR CUSTOMERS

Our customers help us demonstrate every day that rail is the safest, most reliable, and most environmentally friendly way to transport hazardous chemical products. To recognize their safety efforts, we have presented the Thoroughbred Chemical Safety Award for the past 17 years to customers who ship more than 1,000 carloads over our network each year without incident.

In 2012, 54 of our customers earned the award, safely shipping more than 127,000 carloads of chemical products and goods, including industrial chemicals, petroleum, biofuels, and sulfur.

We also partner with customers through our work with TRANSCAER. For example, we move railcars for DuPont, PCS, BP, and GATX free of charge so that the cars can be used for TRANSCAER drills and training of emergency responders.

HELPING PREPARE FOR EMERGENCIES

Norfolk Southern earned a 2012 National Achievement Award from Transportation Community Awareness and Emergency Response, or TRANSCAER®, for our efforts in helping communities prepare for and respond to possible hazardous materials transportation incidents. It is the 13th time and the 11th consecutive year that our railroad has received the award.

In addition to training emergency responders, we conducted railroad operations classes for FBI agents and railroad liaison agents from the National Joint Terrorism Task Force operated by the FBI, and participated in four drills for local, state, and federal agencies.

LIFETIME OF SERVICE

Norfolk Southern employee William J. “Bill” Oertly, a hazardous materials compliance officer in Roanoke, Va., won the 2012 Transportation Community Awareness and Emergency Response Torch Award in recognition of lifetime achievement.

Oertly has worked for 10 years in hazardous materials compliance with Norfolk Southern. Prior to that, he was a senior inspector with the Association of American Railroad’s Bureau of Explosives and an inspector with the Federal Highway Administration.

At Norfolk Southern, Oertly has played a key role in training emergency responders. In 2012, he individually trained 674 emergency responders during TRANSCAER training exercises. He has served as our representative on the National TRANSCAER Task Force, helped plan and participate in TRANSCAER Whistle-Stop events, and has been involved in local emergency planning committees. In addition, Oertly has helped develop TRANSCAER training programs and Norfolk Southern’s Emergency Response Guide to Railroad Incidents.

Communicating with Communities

We work with communities to educate residents about how to stay safe around railroad-highway grade crossings and the dangers of trespassing on railroad property.

RIDING THE RAILS WITH OPERATION LIFESAVER

Norfolk Southern's priority on safety extends to our communities. Through our partnership with Operation Lifesaver, the national safety program, we help educate the public about highway-rail grade-crossing safety and discourage trespassing on railroad property.

In 2012, we operated nine Operation Lifesaver trains to promote highway-rail and pedestrian safety to communities along the major rail routes we operate in Florida, Georgia, North Carolina, Virginia, Tennessee, Ohio, and Illinois. More than 780 people participated, including community leaders, law enforcement officers, safety officials, and emergency first-responders.

Guests rode inside our Pullman coach cars, where monitors streamed a live video feed from the front of the locomotive, giving guests a view of what locomotive engineers see while operating a train.

NS employees serve in leadership roles and volunteer as certified presenters on Operation Lifesaver trains. The NS police department works with local police, systemwide, to strengthen the trespasser abatement program and patrol grade crossings.

OUR BRAINY WANTS PEOPLE TO BE SAFE

Another community-based safety effort is our "Train Your Brain" campaign. It is designed to increase public awareness about rail safety and decrease trespassing and highway-rail grade-crossing accidents. The campaign features our giant pink public safety ambassador, "Brainy," who makes appearances at community events. Employees often volunteer to don the Brainy costume, and the sight of a pink brain wandering around at public events instantly draws the attention of children and adults.

In 2012, Train Your Brain focused on Alabama markets, targeting college sporting events, state fairs, and other public events. Brainy appeared at 19 events to remind people to be smart at railroad crossings.

For railroad safety tips, event photos, or to find out more about the campaign, visit www.BrainysWorld.com or find Brainy on our Facebook page.

A VIRTUAL CONNECTION WITH OUR COMMUNITIES

Staying connected with the communities we serve has become as easy as logging onto a computer or smartphone. Norfolk Southern now can communicate easily with the communities we serve through Facebook, Twitter, YouTube, and other online social media outlets. They help us engage people who might not understand what a freight railroad contributes to the economy or the benefits of shipping the goods of everyday life by rail.

An online world provides a platform for us to connect with our communities as we continually look for ways to engage and inform the public about the value of freight railroads.

“As a business-to-business company, it is important to use different techniques to keep people interested in what we do,” said Stacey Hugo, our manager of community outreach.

We tiptoed into the brave new world of social media in 2007, creating a YouTube account. We expanded onto Facebook and Twitter in 2010. Since then, we’ve become involved with Pinterest, Instagram, Flickr, and Tumblr.

By early 2013, our Facebook page had more than 30,000 fans and our Twitter account had more than 6,400 followers. On Facebook, 46 percent of our fan base is female, indicating that women have a keen interest in the railroad industry.

Hugo has worked with our Human Resources Department to use social media for recruiting potential employees. We now target schools and colleges by posting on their Facebook pages and tagging them on Twitter to draw a diverse pool of candidates to our pages and into our hiring process.

During 2012, we also used social media to celebrate the 30th anniversary of Norfolk Southern, including showcasing locomotives painted in the color schemes of 20 of our predecessor railroads. “Exhibiting our heritage through social media shows we are proud of who we are and where we came from,” Hugo said.

During public and nonpublic events, we post photos in real time online, letting viewers experience a sense of immediacy with the railroad. NS is sharing more stories about community events we participate in—such as Clean the Bay Day, Tour de Cure bicycle fundraisers, the Special Olympics, and Boy Scout Pinewood Derby events. They put a human face on the company and help us connect with others on a more personal level. We think that’s good for business.

A VOICE IN THE COMMUNITY

While social media allow us to reach a broad audience, our Thoroughbred Speakers Network helps us form more intimate bonds with communities.

The network, formed in 2005, comprises NS employees and executives who volunteer to share the importance of rail transportation with civic, business, school, and other organizations during breakfast, luncheon, or evening meetings. We field a steady stream of requests for railroad representatives to attend these gatherings to address questions or provide information about the company.

Our speakers emphasize the importance of a safe, secure, and efficient freight rail system. Presentation topics include the rail industry’s impact on local and national economics, environmental benefits of transporting goods by rail, public-private partnerships, technology on the railroad, and Norfolk Southern’s role in addressing the nation’s transportation crisis.

In 2012, Wick Moorman, our CEO, gave about 20 executive presentations. The network has coordinated more than 130 presentations since it was formed.

SUSTAINABILITY IN ACTION:

CREATIVE THINKING REDUCES ENERGY USE – AND COSTS



Through our InnovatioNS program, Norfolk Southern encourages employees to look for ways to make their work safer, more efficient, and more cost effective. **Brian Thomas'** ingenuity has saved the company money and contributed to its sustainability efforts.

To save money and do his part to preserve the environment, Brian Thomas looks for ways to conserve energy at home. It was only natural that Thomas, Aircraft Maintenance manager at Norfolk Southern's corporate hangar in Norfolk, would take that concept to work, where managing energy use can be a challenge. "The hangar is not manned 24/7," he explained. "We're coming and going at all hours."

To avoid energy waste when no one is using the facility, Thomas implemented a system in which the last employee out of the building each day powers down everything that doesn't have to be running. He also led an effort to have an automatic off-on switch designed and installed to turn the hangar's heaters off when the doors are opened.

"It used to take a lot of effort to turn the heaters off when the doors opened, but not turning them off was a waste because the doors often stood open for up to an hour," Thomas said. "Now we've got an automatic switch that doesn't turn the heating system back on until the doors are completely closed."

A large ceiling fan installed in the hangar pushes heat down to the floor in winter, and aircraft maintenance crews keep the heat set no higher than 60 degrees. After installing upgraded dual gas and electric heaters in office spaces and replacing the lighting with efficient compact fluorescent lights, the hangar has experienced significant energy savings.

"We've seen a 60 percent reduction in energy consumption," Thomas said. The monthly electric bill was slashed by about two-thirds.

"NS has allowed enough money in the budget to make these energy improvements," Thomas said, "and I always try to make people aware. Even when we're here, if the aircraft is out flying and we're not working in the hangar, we cut the lights way back."

SUSTAINABILITY IN ACTION:

A NORFOLK SOUTHERN 'RIVER STAR'



Norfolk Southern is committed to reducing its footprint on the environment, part of its pledge to be a good corporate neighbor and environmental steward. **Ray Jones**, a 32-year railroader, lives that commitment.

Ray Jones' environmental stewardship took root while growing up on the Elizabeth River in Norfolk, Va., our headquarters' city. As a youth, he spent much of his free time on the water and saw firsthand the damage imposed by years of industrial pollution and neglect.

"I've seen the river change over the years, and I've realized I can do something to make a difference," Jones said. As assistant division manager of Mechanical Operations at our Lamberts Point export coal transload facility, Jones is doing just that.

Since returning to the waterfront facility in 2002 from Roanoke, he has helped oversee the railroad's efforts to improve the river's water quality. That includes construction of a multi-million-dollar stormwater reclamation project, and a "Hydrocyclone" filtration system that removes coal particles and pollutants from stormwater runoff.

In addition, he supported efforts to establish artificial oyster beds offshore of the terminal, to foster the restoration of oysters in the river. He has also been involved in our plans to develop a living shoreline that will restore wetlands and natural habitat. He is one of the terminal's points of contact for the nonprofit Elizabeth River Project, the Virginia Oyster Restoration Center, and the Chesapeake Bay Foundation; conservation groups working to protect and conserve the commercial and recreational waterways on the river and bay.

Jones' efforts helped Lamberts Point achieve Model Level status in the Elizabeth River Project's River Stars program, the organization's highest designation for business members.

To recognize his commitment, Norfolk Southern selected Jones as its nominee for the 2012 John H. Chafee Environmental Excellence Award, sponsored by the Association of American Railroads. Jones and five other railroaders from the nation's largest railroads were recognized at a ceremony in Washington, D.C., for demonstrating the highest level of environmental stewardship during 2012.

The 425-acre Lamberts Point facility is the largest marine coal export terminal in North America. Recognizing the environmental and economic benefits of reusing stormwater runoff from the property, Jones helped oversee Norfolk Southern's development of a \$1.3 million stormwater reclamation project. In early 2013, the terminal installed a hydro-cycling feature, an infrared filtration system that removes coal particles and other impurities before sending the water into a holding tank where additional contaminants are removed. The reclaimed water, nearly clean enough to drink, is used to spray coal cars during dumping to minimize dust and to clean coal conveyors.

The project is leading to the reuse of more than 1 million gallons of stormwater every month and helping Norfolk Southern conserve water. It is reducing the railroad's use of municipal water by an estimated 18.3 million gallons annually.

"We've had huge savings in our use of city water," Jones said. "Plus, we're saving the river's ecosystem by capturing the stormwater runoff and reusing it."

SUSTAINABILITY IN ACTION:

COMMITTED TO A GREENER WORKPLACE



Employees at Norfolk Southern have embraced the railroad's sustainability efforts. At many locations across the system, employees such as **Emily Hunter** have taken the initiative to launch recycling and other green initiatives.

When a Norfolk Southern intern started a recycling effort at the Conway Locomotive Shop in Conway, Pa., a year ago, Emily Hunter, a fireman and oiler, decided the program needed to continue for the long haul.

"In 2012, NS topped all the railroads in *Newsweek's* Green Rankings for efforts to increase fuel efficiency and new technology, and we are committed to reducing environmental impacts," Hunter explained. "I was intrigued by how Conway could help contribute to the sustainability efforts."

To make things easy for employees, Hunter placed recycling bins for cardboard, paper, and plastic in the lunch room and offices. "It makes recycling convenient," she said. "If it's convenient, it works."

Each day, Hunter collects the recycled items and makes sure the bins aren't overflowing. A private waste management company picks up the paper, plastic, and cardboard every week.

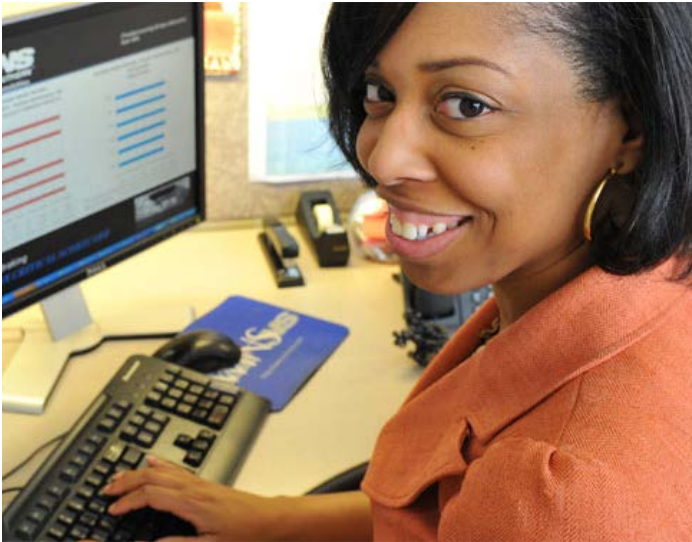
"Right now it's a Conway mechanical initiative," Hunter said, "but as we complete construction of a new locomotive shop, we are looking forward to expanding our recycling there."

She hopes to double the shop's recycling efforts in 2013. Presently, the Conway shop recycles about two bales of crushed cardboard, two bins of paper, and five bins of plastic bottles a month. The bins measure 36 cubic feet.

"I want to research what else we can recycle," Hunter said. "NS has been so supportive. The company has supplied the recycling bins, they allow me to print posters advertising the recycling efforts, and they give me time to work on it."

SUSTAINABILITY IN ACTION:

KEEPING LOCOMOTIVES MOVING DOWN THE TRACK



Norfolk Southern is continually looking for ways to increase the efficiency and productivity of operations. **Devina Miller** has played a key role in a Mechanical Department initiative dubbed **Mission Critical**.

Devina Miller, a systems engineer in Atlanta, is slow to take credit for keeping more of Norfolk Southern's locomotives out of repair shops and on the track. However, she is enormously proud of the Mechanical Department's successful Mission Critical troubleshooting program.

"We've critically reduced the number of locomotive breakdowns, so we have more locomotives available to move freight for customers," Miller said.

Mission Critical is designed to reduce the five most common mechanical and engine problems that can literally stop a locomotive in its tracks while on the rails transporting freight. Miller helped develop a computerized system that enables the department to easily trace locomotives that go into shops for a Mission Critical repair. She generates weekly reports that are emailed to locomotive-shop employees across the system, showing which shops handled repairs successfully and where locomotives had to be returned to a shop for additional work. A shop scores a success if a locomotive remains in the field for at least 30 days without another Mission Critical failure.

"One important thing to come out of this is that we have changed our locomotive troubleshooting techniques," Miller explained. NS shop employees previously made only obvious repairs, without necessarily checking for other potential failures. Now, using standardized troubleshooting guides developed by teams of department employees, shop mechanics are checking engines more thoroughly and catching things before they become critical problems.

"Everyone is using the same troubleshooting guide now," Miller said, "so basically anyone can follow the step-by-step process and repair a locomotive."

The process has increased knowledge transfer from more experienced employees to younger ones and given people greater pride in their work, Miller reported. It's also sparked friendly competition among the shops.

"We can see how each shop is performing and how the shops stack up against one another," she said. "No one wants the locomotive that failed to be the one with their name on the work order."

The results have been good for business. In 2012, the department's overall success rate with Mission Critical repairs was nearly 94 percent, up from nearly 87 percent two years earlier.

"Now we're running more trains and getting freight to the customer faster," Miller said. "Our goal is to have a quality locomotive out there on the tracks."

SUSTAINABILITY IN ACTION: IN PURSUIT OF DREAM



Norfolk Southern wants employees to have ample opportunities to develop their skills and advance their careers. **Jerome Perry** is taking advantage of an NS program to further his education.

Jerome Perry thought he would have to give up his dream of a college degree after he lost a grant that was funding his education at Norfolk State University. That all changed, however, when he joined Norfolk Southern in 2008 and learned that the company paid up to \$5,600 a year toward tuition for an associate's, bachelor's, or master's degree.

Perry, a dumper operator at Lamberts Point coal pier in Norfolk, Va., jumped at the opportunity. Since then, with financial assistance from the railroad, he has completed an associate's degree in general studies at Strayer University and is working on a bachelor's degree in business administration. "I never thought I'd be with a good company where I could have a chance to finish my education," he said.

Perry said he hopes his university credentials will help land him a position in the railroad's Labor Relations Department one day. "I feel like my association with the International Brotherhood of Electrical Workers, along with my education in psychology, philosophy, and religion are giving me the skills for learning how people think," he explained. "I'm a people person. I talk to everybody. I listen to everybody. When people are in conflict, I say, 'Don't take it home with you; let's talk about it.' "

Perry said he is taking courses in labor relations and human resources management. "I love the unions, and I like to see the unions and management work together," he said. "At lunchtime, at breaks, I have my books, and I'm studying. I want to move up in the company. It's all about taking the degree I have and using the company's funding assistance to enhance it."

SUSTAINABILITY IN ACTION:

WHERE GOOD HEALTH MEETS GOOD DEEDS



As part of our employee wellness program, WellNS, Norfolk Southern in 2011 introduced Power Train, an initiative that combines physical fitness and charitable giving. **Misty Braden** organized a Power Train team in Knoxville to help fund breast cancer research after a colleague was diagnosed with the disease.

After learning last year that a colleague had breast cancer, Misty Braden, a train dispatcher in Knoxville, Tenn., wanted to help. Already skilled in community outreach through volunteer work with the Operation Lifesaver railroad public safety program, Braden decided to organize a Norfolk Southern Power Train team. The purpose: To raise money for the Susan G. Komen for the Cure®, a nonprofit group dedicated to ending breast cancer.

Any NS employee can organize a Power Train team to raise money for a charitable cause. The teams must have at least 10 employees who agree to participate in some kind of physical activity, such as a run or walk, in support of a nonprofit organization. In exchange, NS donates \$1,000 to the charity.

"I'd been wanting to do a 5K run for a while," Braden says, "so I sent an e-mail out to people in all different departments in the division and talked to people one-on-one." Once she explained that NS would donate \$1,000 toward breast cancer research, "everyone wanted to participate," Braden said.

By September 2012, Braden had a 45-member team. They did fundraising for 30 days, completed a 5K Race for the Cure® run in Knoxville, and brought in \$3,000.

In addition to the sizeable donation to fight breast cancer, Braden's efforts inspired several employees to make permanent lifestyle changes for better health. After the Race for the Cure, several members of Braden's Power Train team completed a run that benefitted the East Tennessee Children's Hospital in Knoxville. Braden plans to organize another Power Train team to support Alzheimer's research.

"Some of our team members joined the Couch to 5K program, which is designed to get you off the couch and able to do a 5K run in eight weeks," Braden said. "I think this has been an inspiration to several people to improve their health."

SUSTAINABILITY IN ACTION:

A LITTLE EFFORT, A LOT OF FOOD FOR THOSE IN NEED



To strengthen our communities, Norfolk Southern promotes and supports employee volunteerism. Many employees, like **Amanda Carpenter**, volunteer their time, treasure, and talents to build community connections.

Amanda Carpenter, clerk at the Harrisburg Division office, enjoys volunteering in her community. When she realized her administrative position connected her to many people on Norfolk Southern's system in central Pennsylvania, she decided to use that access to a charitable advantage.

"I came up with the idea of doing a food drive because it was close to Thanksgiving," she said. "I contacted the Central Pennsylvania Food Bank and asked what I could do to help."

After getting an enthusiastic go-ahead from the food bank, Carpenter organized efforts to place food collection bins at her division office and at the area terminals and other yard locations. "I had four large barrels and boxes in different locations in the crew buildings," she explained.

Once word about the drive began circulating in the rail yards, the food started pouring in. "The barrels were overflowing and the boxes were full in three weeks," she said. Under Carpenter's organization, NS employees donated 806 pounds of food, enough to provide meals to 670 families.

Carpenter was elated by the success. "The food drive was something I thought everybody would want to contribute to," she said. "All the supervisors were very much on board with it, and the food bank was very happy."

Carpenter hopes to organize another drive this year. "I am fortunate to have the resources to reach out to so many departments," she said. "We've done several other volunteer things since last Thanksgiving, and Norfolk Southern always does Toys for Tots. Now we're working on a project for homeless veterans."

Norfolk Southern offers the perfect environment for giving back to local communities, she said, because the company is committed to making a positive difference in areas where the railroad operates and because many employees share that philosophy of giving back. For her efforts, Carpenter earned an NS SPIRIT Award, which recognizes employees who exemplify the company's core values.

"I'm very humbled to be recognized because all I did was initiate the food drive," she said. "It was definitely a division effort."

SUSTAINABILITY IN ACTION: PARTNERING FOR SAFETY



Safely operating our railroad is Norfolk Southern's No. 1 priority. In addition to efforts to keep our employees safe on the job, we partner with communities in various ways to promote public safety. Employees **Richard Vaughan** and **Greg Valentine** demonstrate that commitment.

In March 2012, a brush fire between the New Jersey Turnpike and the "Chemical Coast" rail main line burned up a two-mile stretch of wetlands, held up highway and railroad traffic for four hours, and disrupted air traffic at the Newark-Liberty International Airport. The line is operated by Conrail, which is partially owned by Norfolk Southern. Police special agents Richard Vaughan and Greg Valentine, Norfolk Southern employees, took the experience as a learning opportunity for creating better safety and emergency response partnerships between the railroad and the communities it serves.

Firefighters had difficulty extinguishing the blaze because they couldn't reach it from local streets or easily find access points across tracks. "We did an after-action plan when it was over," Vaughan said, "and decided there had to be a better way. We think that fire could have been handled in half the time."

Vaughan and Valentine initiated a Railroad Safety and Awareness training program for emergency and Port Authority personnel in Newark and Elizabeth, N.J. They held the training every Thursday for a month, showing emergency responders and state environmental officials access points along the railroad, availability of fire hydrants, and communication procedures.

"Now we can facilitate communication between trains, police, and fire departments," Vaughan said. "Everything can be handled on one central radio channel."

Because the Chemical Coast tracks run through oil refineries, it's critical that railroad employees and community emergency personnel cooperate and be prepared to act quickly in the event of a fire or other emergency involving hazardous materials, Vaughan said. Since the training, Norfolk Southern coordinated the handling of a small fire in Newark. "The fire was out in 20 minutes," Vaughan said. "The city called us. We met the fire department and escorted them in."

Valentine said the training efforts have paid off in other ways, too. "It put us out there and let Elizabeth and Newark know that we care about their safety and want to be partners."

SUSTAINABILITY IN ACTION:

BUILDING COMMUNITY PARTNERSHIPS

Norfolk Southern routinely partners with local, state, and federal government officials on projects that benefit communities and the country. Employees such as **Ed Sites** and **David Dize** are the ones who make these partnerships work.

Imagine trying to build a four-lane highway extension over three railroad main lines and three yard tracks on a busy rail terminal. When Fort Wayne, Ind., officials approached Norfolk Southern with a plan to do just that at our terminal there, the railroad worked with the city to show what a true partnership is all about.

When the Maple Crest Road project was completed in 2012, the city and its contractor said Norfolk Southern employees “made this a team effort to get the project completed on time with minimal disruption to either side.” The success was due in no small part to David Dize, track supervisor, and Ed Sites, flagging foreman.

Dize was responsible for coordinating the construction activity around railroad operations during the two years of construction. Altogether, three highway bridges were built above the tracks. Each bridge had spans that crossed over three sections of track, and trains couldn’t run when they were being set.

“We had three bridges going up at once, and we worked really hard to avoid delaying the contractor and to keep them from delaying our trains,” Dize explained. To assist, Dize, with the help of NS’ Transportation Department, scheduled trains to allow longer windows of time for the bridge construction, particularly on weekends; he sometimes coordinated cutting trains in half to get the contractor’s work equipment across the lines.

The project’s complexity required close coordination between the railroad, the city, and the contractor. Sites acted as flagman for the contractor’s employees, helping ensure that the trains and construction activities were operating safely and on schedule. “Ed was with all the construction crews every day to make sure they followed our safety rules and roadway worker protection rules.”

Today, 10,000 vehicles a day cross the bridges over the railroad terminal, a big boost for safety because these cars previously had to drive over the lines.

“Communication was the key,” Dize said. “We had partnership meetings with all the players once every two weeks to talk about things that could have gone better and how to move forward. This project could have delayed all of us for years if everybody hadn’t worked together.”

OUR GOVERNANCE STRUCTURE AND MANAGEMENT SYSTEMS

Norfolk Southern employees are guided by a core set of values built on safety, performance, integrity, respect, innovation, and teamwork. We base decisions on doing the right thing.

A VISION FOR SAFETY, SERVICE, SUCCESS

Norfolk Southern's corporate policies and procedures are designed to guide our economic, environmental, and social performance toward a straightforward and uncompromising vision:

To be the safest, most customer-focused, and successful transportation company in the world.

A CORPORATE SPIRIT OF CORE VALUES

At Norfolk Southern, our good name stands at the heart of who we are and have been for 186 years. Our people, customers, communities, and stockholders are important to us, and strong relationships with each of these groups are vital to our success.

A set of core values, called SPIRIT values, define behaviors that are key to fulfilling our corporate creed and vision statement. These SPIRIT values—Safety, Performance, Integrity, Respect, Innovation, and Teamwork—provide a framework of expectations for employee conduct.

SAFETY: We put safety first by taking care of the people around us and following the rules.

PERFORMANCE: We are performance-driven and committed to providing quality customer service. We act on facts and are accountable for results.

INTEGRITY: We do the right thing. We are open, fair, honest, and straightforward.

RESPECT: We believe in the importance of all of our stakeholders. We value the ideas and beliefs of our coworkers.

INNOVATION: We constantly seek new ideas and creative solutions to business challenges.

TEAMWORK: We believe that working together always produces the best results.

A CODE OF ETHICS SUPPORTS VALUES

The Thoroughbred Code of Ethics builds upon the SPIRIT values by providing us with a mutual understanding of how our directors, officers, and employees are expected to conduct themselves.

POLICIES AND PROCEDURES

Our corporate policies and procedures address topics related to economic, environmental, and social performance, offering detailed guidance for implementation of the SPIRIT values and our code of ethics.

We are committed to protecting the quality of the environment for employees, customers, and communities. It is our policy to ensure that every employee is trained in and fully understands the

GRI INDICATOR:

These indicators from the 2013 report are addressed on this page:

4.6

4.7

4.8

4.9

S07

We strive to minimize waste through activities such as recycling, reduced consumption of energy, greater use of environmentally preferred materials, and use of nonpolluting technologies, procedures, and work practices.

environmental requirements of their job, and is responsible and accountable for conducting work activities in a manner that meets or exceeds applicable environmental compliance standards.

Our policies help protect the environmental quality of the company's real estate assets through sound management of land, water, and other property resources. Our policy is to comply fully with applicable laws and regulations related to protecting the environment and transporting environmentally sensitive materials. We cooperate fully with all governmental authorities charged with protecting the environment or with regulating transportation of hazardous materials. It is our policy to ensure that appropriate public agencies are informed about any incident relating to our operations that has the potential to cause harm to surrounding communities and the environment.

We strive to minimize waste through activities such as recycling, reduced consumption of energy, greater use of environmentally preferred materials, and use of nonpolluting technologies, procedures, and work practices.

OUR KEY OBJECTIVES

Norfolk Southern's procedures require that corporate activities be handled in accordance with our policy objectives and comply with all applicable federal, state, and local laws and regulations. Overriding procedural objectives to implement these policies include:

- **Protecting people and communities**
- **Protecting the environment**
- **Budgeting for environmental quality**
- **Anticipating legislative impacts on current operations**

To ensure continuing improvement, reduction of pollution, and achievement of these policy objectives, appropriate processes for measuring performance, reporting environmental information, and evaluating environmental effects have been implemented.

We expect each employee to regard this effort to attain environmental quality as a personal and a corporate responsibility. In addition, employees at all levels of the company have specific responsibilities for implementing our environmental policy. Norfolk Southern's corporate policies and procedures are made available to employees on the company's ethics and compliance intranet site.

SAFETY IS GOOD BUSINESS

We are committed to the principle that safety is good business and that all employees should be provided a safe working environment.

Our employee safety record demonstrates our commitment. For 23 consecutive years, our operations workforce earned the E. H. Harriman Award gold medal for maintaining the best safety record among the largest North American railroads. While that award was discontinued after the presentation of 2011 results, we continue as an industry leader in safety.

We believe that the overall safety and health of our employees is in the best interests of each employee and the company. All of our people are expected to promote safety, as it is both a personal and a corporate responsibility.

Our safety policy centers on the following six tenets:

- **All injuries can be prevented**
- **All exposures can be safeguarded**

- **Prevention of injuries and accidents is the responsibility of each employee**
- **Training is essential for good safety performance**
- **Safety is a condition of employment**
- **Safety is good business**

A PROACTIVE APPROACH TO SAFETY

Norfolk Southern promotes a proactive safety process. The process aims to:

- **Minimize safety and health risk factors to our employees and the communities in which we operate by employing safe and appropriate technologies, programs, and operating procedures**
- **Educate our employees about safety and health risk factors in their workplaces**
- **Evaluate procedures and work practices to minimize potential employee exposures and improve safety in the workplace**
- **Inform the affected public about incidents relating to company operations that pose general safety or health hazards**
- **Comply with applicable laws, regulations, and rules related to safety and health in all of our business activities**
- **Cooperate with all regulatory authorities charged with protecting the safety and health of the public and our employees**

Our company has an Operations Division Safety and Service Steering Committee that is responsible for interpretation of Norfolk Southern's safety policy. In addition, all department vice presidents are responsible for the implementation and administration of the policy in their respective departments, and each employee is accountable for complying with it.

SAFEGUARDING THE ENVIRONMENT

Norfolk Southern has numerous internal management systems in place to ensure reasonable responsible management of environmental compliance matters and corporate sustainability initiatives.

Formal corporate policies and procedures form the building blocks of this system. Norfolk Southern's "Our World Our Choice" environmental reference manual summarizes how the company manages its environmental systems to ensure local supervisors understand their responsibilities. Training in various forms, including classroom instruction and hands-on exercises, is a large part of our internal management system. Employees accompany environmental personnel during inspections and audits of yards and terminals.

Our "Sentinel" program provides intensive hazardous material awareness and response training to select supervisory personnel. We also provide annual training of personnel as required by our various environmental permits and plans, and we periodically distribute training materials that are displayed on safety bulletin boards across the system to enhance awareness of current environmental, hazardous material, safety, and security topics of interest.

REGULATORY ENVIRONMENT GOVERNS RAIL OPERATIONS

In a business world subject to government regulation, we take a proactive approach to fully comply with the rules, participate in the political process, and manage business risks.

Like all U.S. rail freight transportation companies, Norfolk Southern is subject to significant governmental regulation and legislation over commercial, environmental, and operating matters. We must adhere to commercial regulations issued by the Surface Transportation Board, which has jurisdiction over some routes, some fuel surcharges, some conditions of service, the extension or abandonment of rail lines, and rail mergers and acquisitions. Railroads also are subject to safety and security regulation by the Department of Transportation and the Department of Homeland Security.

Norfolk Southern's operations must comply with extensive environmental laws and regulations concerning, among other things, emissions to the air; discharges to waterways or groundwater; handling, storage, transportation, and disposal of waste and other materials; and the cleanup of hazardous material or petroleum releases.

Our management practices are focused on compliance with these various regulations and on handling operating risks in a responsible manner.

GOVERNMENT RELATIONS PROGRAM MONITORS THE POLITICAL PROCESS

The political process significantly impacts Norfolk Southern through government policies, legislation, and regulatory decisions. As a result, our board of directors believes it is in the best interests of Norfolk Southern and our stockholders to participate in the political process by engaging in a government relations program.

The government relations program seeks to educate and inform public officials about issues important to our business, and it supports public officials and candidates whose views match those of Norfolk Southern. By doing so, we further public policy goals that are consistent with the sustainability of our business and values.

Please [click here](#) for more information about Norfolk Southern's government relations program, including information about our political contributions.

COMPLIANCE WITH ANTITRUST LAWS

U.S. antitrust laws, enacted to promote free and fair competition, regulate what Norfolk Southern and its employees can do when acting alone or with our competitors.

Our policy is to comply fully with all applicable federal and state antitrust laws. No officer or employee is permitted or authorized to take any action inconsistent with the antitrust laws or to permit or order others to take such action.

Application of antitrust laws to particular facts is rarely simple, particularly in the railroad industry, where connecting railroads must work together to move customers' freight. Whenever any officer or employee believes that proposed activity raises antitrust questions, they are instructed to contact our law department, where designated attorneys can assist to ensure that we comply with the law and company policy. In 2012, there were no findings of antitrust violations by Norfolk Southern.

MANAGING BUSINESS RISKS

Various risks and challenges are inherent to the operation of rail freight transportation companies, including Norfolk Southern. Current information about our most significant risk factors is available in the company's annual report on Form 10-K for 2012 (pages K13 through K16), as supplemented by the company's subsequent quarterly reports on Form 10-Q. These are available on the [company's website](#). We have practices and policies to manage and mitigate the effects of all these potential risks, including climate change.

GRI CONTENT INDEX

● partially reported ● fully reported

Norfolk Southern declares that this report complies with the Global Reporting Initiative's 3.1 Level C reporting standards.

PROFILE DISCLOSURES

STRATEGY AND ANALYSIS

Profile Disclosure	Description	Reported	Cross-reference/Direct answer
1.1	Statement from the most senior decision-maker of the organization.	●	CEO Letter
1.2	Description of key impacts, risks, and opportunities.	●	CEO Letter and CSO Letter

ORGANIZATIONAL PROFILE

Profile Disclosure	Description	Reported	Cross-reference/Direct answer
2.1	Name of the organization.	●	Norfolk Southern Corporation
2.2	Primary brands, products, and/or services.	●	Business Profile
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	●	Business Profile
2.4	Location of organization's headquarters.	●	Three Commercial Place, Norfolk, VA
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	●	Business Profile
2.6	Nature of ownership and legal form.	●	Business Profile
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	●	Business Profile
2.8	Scale of the reporting organization.	●	Business Profile
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	●	There are no significant changes to NSC's size, structure, or ownership in 2012.
2.10	Awards received in the reporting period.	●	Awards & Recognition

REPORT PARAMETERS

Profile Disclosure	Description	Reported	Cross-reference/Direct answer
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	●	About Our Report
3.2	Date of most recent previous report (if any).	●	Norfolk Southern issued its last sustainability report in November 2012.
3.3	Reporting cycle (annual, biennial, etc.)	●	Annual
3.4	Contact point for questions regarding the report or its contents.	●	footprints@nscorp.com
3.5	Process for defining report content.	●	About Our Report and Sustainability Reporting
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	●	About Our Report and Sustainability Reporting; NS Corp.'s report focuses primarily on NSC and the operations and major operating subsidiary, Norfolk Southern Railway Company. The financial and greenhouse gas data referenced encompass the activities of NSC's majority-owned and controlled subsidiaries.
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	●	Our report, which is self-declared GRI level C, covers our wholly-owned global operations. We work with partners to build strategic partnerships to broaden our sustainability knowledge. Since we do not own these external organizations, we cannot include their full activities and results in this report.

3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	●	See Standard Disclosures 3.6 and 3.7
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	○	For measurement of our GHG performance, please go to Solid Progress.
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	●	There are no restatements in the current report.
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	●	Sustainability Reporting
3.12	Table identifying the location of the Standard Disclosures in the report.	●	GRI Index
3.13	Policy and current practice with regard to seeking external assurance for the report.	●	About Our Report

GOVERNANCE, COMMITMENTS, AND ENGAGEMENTS

Profile Disclosure	Description	Reported	Cross-reference/Direct answer
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	●	Pages 17-21 of DEF14A
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	●	Pages 18 of DEF14A
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	●	Pages 6-10 of DEF14A
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	●	Page 34 of DEF14A
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).		
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	○	Governance Structure and Management
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	○	Governance Structure and Management
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	●	Governance Structure and Management
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	○	Governance Structure and Management
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.		
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.		
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.		
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	○	Our Key Public Private Partnerships, Strengthening Connections and Environmental Partnerships
4.14	List of stakeholder groups engaged by the organization.	●	About Our Report
4.15	Basis for identification and selection of stakeholders with whom to engage.	○	About Our Report
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	○	Communicating with Communities
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.		

PERFORMANCE INDICATORS

ECONOMIC

Performance Indicator	Description	Reported	Cross-reference/Direct answer
EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	●	Business Profile and Financial Performance
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	●	Page K-14 of 2012 10-K
EC3	Coverage of the organization's defined benefit plan obligations.	○	Employee Benefits and Benefits Overview
EC4	Significant financial assistance received from government.		
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.		
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.		
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.		
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	●	Business Profile and Financial Performance
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.		

ENVIRONMENTAL

Performance Indicator	Description	Reported	Cross-reference/Direct answer
EN1	Materials used by weight or volume.	○	Recycling Railroad Materials
EN2	Percentage of materials used that are recycled input materials.	○	Recycling Railroad Materials
EN3	Direct energy consumption by primary energy source.	●	Energy Efficiency
EN4	Indirect energy consumption by primary source.	●	Energy Efficiency
EN5	Energy saved due to conservation and efficiency improvements.	○	Energy efficiency
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	●	Alternative Power Projects
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	●	Energy Efficiency
EN8	Total water withdrawal by source.	○	957,259,000 gallons total water withdrawn
EN9	Water sources significantly affected by withdrawal of water.		
EN10	Percentage and total volume of water recycled and reused.		
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	○	Carbon Mitigation Through Conservation
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.		
EN13	Habitats protected or restored.	●	See EN11
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	○	See EN11
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	○	Carbon Mitigation Through Conservation
EN16	Total direct and indirect greenhouse gas emissions by weight.	●	Carbon Footprint and Strategy
EN17	Other relevant indirect greenhouse gas emissions by weight.	●	Carbon Footprint and Strategy
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	●	Solid Progress and Carbon
EN19	Emissions of ozone-depleting substances by weight.		
EN20	NOx, SOx, and other significant air emissions by type and weight.		

EN21	Total water discharge by quality and destination.		694,501,000 gallons of water discharged to the sewer.
EN22	Total weight of waste by type and disposal method.		Recycling Railroad Materials
EN23	Total number and volume of significant spills.		There were three significant hazardous material releases in 2012: 22,500 gallons of molten sulfur in Ligonier, Ind. on March 27; 53,047 gallons of ethanol in Columbus, Ohio, on July 11; and 1,600 gallons of ethanol in Mt. Vernon, Ill., on Dec. 30. Significant spills or releases are defined as hazardous material releases of 10,000 pounds/10,000 gallons or more or petroleum spills of more than 10,000 gallons.
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.		Hazardous Waste Management
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.		
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.		Environmental Management
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.		As a freight transportation provider, NS is not in the business of manufacturing products for sale.
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.		Environmental Operations Groups
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.		
EN30	Total environmental protection expenditures and investments by type.		Environmental Compliance

SOCIAL: LABOR PRACTICES AND DECENT WORK

Performance Indicator	Description	Reported	Cross-reference/Direct answer
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.		NS as an Employer and A Good Employer
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.		NS as an Employer and A Good Employer
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.		
LA15	Return to work and retention rates after parental leave, by gender.		
LA4	Percentage of employees covered by collective bargaining agreements.		A Good Employer
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.		
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.		
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.		2012 Employee Safety Performance
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.		Employee Benefits
LA9	Health and safety topics covered in formal agreements with trade unions.		
LA10	Average hours of training per year per employee by gender, and by employee category.		
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.		Employee Benefits
LA12	Percentage of employees receiving regular performance and career development reviews, by gender.		
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.		Pages 6-10 of DEF14A
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.		


SOCIAL: HUMAN RIGHTS

Performance Indicator	Description	Reported	Cross-reference/Direct answer
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.		
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.		
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.		
HR4	Total number of incidents of discrimination and corrective actions taken.		
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.		
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.		While we are not aware of any significant risk factors in our operations, NS Corporation always ensures that its operations comply with applicable laws and regulations, and upholds the highest integrity standards, as outlined in The Thoroughbred Code of Ethics.
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of all forms of forced or compulsory labor.		While we are not aware of any significant risk factors in our operations, NS Corporation always ensures that its operations comply with applicable laws and regulations, and upholds the highest integrity standards, as outlined in The Thoroughbred Code of Ethics.
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.		
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.		
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.		
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms.		

SOCIAL: SOCIETY

Performance Indicator	Description	Reported	Cross-reference/Direct answer
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.		
SO9	Operations with significant potential or actual negative impacts on local communities.		
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.		
SO2	Percentage and total number of business units analyzed for risks related to corruption.		
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.		
SO4	Actions taken in response to incidents of corruption.		
SO5	Public policy positions and participation in public policy development and lobbying.	●	Government Relations
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	●	Government Relations
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	●	Governance Structure and Management
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.		

SOCIAL: PRODUCT RESPONSIBILITY

Performance Indicator	Description	Reported	Cross-reference/Direct answer
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.		
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.		
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.		
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.		
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.		Customer Service
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.		The Thoroughbred Code of Ethics
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.		
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.		

Forward-Looking Statements

This sustainability report contains forward-looking statements that may be identified by the use of words such as “believe,” “expect,” “anticipate” and “project.” Forward-looking statements reflect management’s good-faith evaluation of information currently available.

However, such statements are dependent on and can be influenced by a number of external variables over which management has little or no control. These variables include: domestic and international economic conditions; interest rates; the business environment in industries that produce and consume rail freight; competition and consolidation within the transportation industry; the operations of carriers with which NS interchanges; acts of terrorism or war; fluctuation in prices of key materials, in particular diesel fuel; labor difficulties, including strikes and work stoppages; legislative and regulatory developments; results of litigation; changes in securities and capital markets; disruptions to Norfolk Southern’s technology infrastructure, including computer systems; and natural events such as severe weather, hurricanes, and floods.

For a discussion of significant risk factors applicable to Norfolk Southern, see the company’s annual and quarterly reports filed on our corporate website, www.nscorp.com, and with the U.S. Securities and Exchange Commission.

Forward-looking statements are not, and should not be relied upon as, a guarantee of future performance or results, nor will they necessarily prove to be accurate indications of the times at or by which any such performance or results will be achieved. As a result, actual outcomes and results may differ materially from those expressed in forward-looking statements. Norfolk Southern undertakes no obligation to update or revise forward-looking statements.