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## **OVERVIEW**

#### A MESSAGE FROM OUR CEO

Under a sweltering June sun near Yazoo City, Miss., I had the privilege to join our partners at GreenTrees in planting the first of 6 million trees we will grow in the Mississippi Alluvial Valley for the benefit of preserving natural resources and enhancing quality of life in communities we serve in that region.

Joining me that hot day was Blair Wimbush, our corporate sustainability officer, and several other employees, along with the GreenTrees folks and guests who support our sustainability values and our vision for the tree-planting initiative. This project is probably the most public manifestation of Norfolk Southern's carbon mitigation strategy and underscores our commitment to reforestation and conservation of natural resources.



Our collaboration with GreenTrees will foster revitalization of the Mississippi Delta's environmental health and generate economic benefits for a region long served by Norfolk Southern and our predecessor companies. As I said to the group assembled that day, our 180-year history tends to give us a long-term perspective. As a long-cycle business, this kind of sustainable, lasting initiative is exactly what we like to do.

We recognize that our continued ability to thrive as a business is connected to the health of our communities, our environment, our employees, and our economy. In acknowledgment of this common future, we are strengthening our connections with communities and the environment to ensure that the impact we leave—social, economic, and environmental—will be a positive one for years to come. By nurturing relationships with the Mississippi Alluvial Valley and GreenTrees through a project that generates both environmental and financial benefits, we all will breathe a little easier in the future.

I invite you to read more about the GreenTrees project in our 2011 sustainability report, which also tracks progress on a number of our other carbon mitigation initiatives. For example, I am proud to say that we have reached nearly 40 percent of our five-year goal for emissions reductions in just the first year.

Progress like this would not be possible without the ingenuity of our Norfolk Southern employees. As I often say, our corporate success—whether in safety, service, or sustainability—is a reflection of the dedication, talent, and hard work of our people. They are the connections that make our network strong now and for future generations.

Wick Moonman

Wick Moorman CEO

#### A MESSAGE FROM OUR CSO

Norfolk Southern's sustainability program connects to a broad spectrum of corporate initiatives. In our fourth annual sustainability report, we offer a comprehensive review of our continuing progress toward industry leadership in fuel conservation, emissions reduction, efficient energy use, recycling, use of renewable materials, and environmental partnerships. Our steps toward best practices in corporate responsibility are interrelated in their effects on our present success and on our long-term ability to keep our national transportation infrastructure competitive for future generations.

I am pleased to report that we achieved significant strides in our four areas of primary focus since our last sustainability report.

We reduced our greenhouse gas emissions by 3.9 percent per revenue ton-mile of freight in 2010, supported by our investments in more fuel-efficient locomotives and innovative information systems.

We're seeing the benefits of our investments to improve energy efficiency in our facilities and now are concentrating on enhancing our climate control systems after a successful lighting system upgrade.

Our employees have assumed leadership in recycling and other programs that improve the company's sustainability performance. They have done so in ways that have built teamwork through contests and other fun activities.

Our launch of an initiative with GreenTrees to plant more than 6 million trees in the Mississippi Delta demonstrates our increased community engagement.

Looking ahead, we're mindful that we can do something beyond fuel-efficiency gains to have a positive impact on the environment and the communities we serve. We've decided to make reforestation a central component of our carbon mitigation strategy. That could include other reforestation activities conducted in cooperation with nongovernmental and governmental organizations.

Our long-term aim is to continuously strengthen connections with our stakeholders for the mutual benefit of our customers, our investors, our people, and the communities we serve.

Blair Wimbush

Vice President Real Estate and Corporate Sustainability Officer

Bai Winbuch

#### **ABOUT OUR 2011 REPORT**

This is the fourth annual sustainability report issued by Norfolk Southern. Our report details the railroad's sustainability events and undertakings during calendar year 2010 and through June 2011. Performance data is for calendar year 2010, unless otherwise noted.

At Norfolk Southern, we agree with the view that sustainability means meeting the needs of the present without compromising the ability of future generations to meet their own needs. The contents of this report reflect our ongoing efforts to achieve a long-term, sustainable balance between the company's business imperatives and our desire to mitigate the impact of railroad operations on the environment.

Our reporting is informed by the Global Reporting Initiative's G3 Sustainability Reporting Guidelines. Accordingly, this report discloses Norfolk Southern's significant environmental, economic, and social impacts in order to provide our stakeholders a way to assess our commitment to corporate sustainability.

Our stakeholders include shareholders, customers, employees, government and industry partners, and the communities we serve.

The railroad's Environmental Policy Council, comprised of senior corporate officers, and our Safety and Environmental Protection Department ensure that appropriate policies, procedures, and resources are in place to address environmental, health, and safety issues across our rail system. The policy council, a corporate sustainability team headed by our corporate sustainability officer, and a group of core executive sponsors, including the chief executive officer, verified the accuracy and reliability of this report.

Additional information about Norfolk Southern's sustainability programs and past sustainability reports are available at <a href="www.nssustainability.com">www.nssustainability.com</a>. Norfolk Southern welcomes your feedback on our annual sustainability report and invites you to send your comments and suggestions to <a href="mailto:footprints@nscorp.com">footprints@nscorp.com</a>.





#### SUSTAINABILITY HIGHLIGHTS IN OUR 2011 REPORT

- For the 22nd consecutive year, Norfolk Southern employees in 2010 achieved the industry's best safety record for large railroads in North America. We reported 0.89 injuries per 200,000 employee-hours for the year, the lowest injury ratio ever recorded by our railroad.
- Compared with 2009, we reduced our greenhouse gas emissions by 3.9 percent per revenue ton-mile of freight in 2010. We achieved nearly 40 percent of our goal to reduce emissions by 10 percent per revenue ton-mile between 2009 and 2014.
- We improved the fuel efficiency of our locomotive fleet by 2.2 percent over 2009. That resulted in diesel fuel savings equivalent to 10.2 million gallons and reduced emissions of 104,924 metric tons of carbon dioxide equivalents.
- Since 2007, the first year we reported our fuel intensity, we have improved fuel economy by nearly 5 percent. That translates into diesel fuel savings of 21.6 million gallons and reduced emissions of 222,067 metric tons of carbon dioxide equivalents.
- As part of our carbon mitigation strategy, Norfolk Southern launched a \$5.6 million initiative to restore 10,000
  acres of former woodlands in the Mississippi Alluvial Valley. The initiative includes the planting of 6.04 million
  native hardwoods and cottonwoods.
- We ramped up production of our locomotive rebuild program, which involves giving new life to 1970s- and 1980s-era locomotive frames.
   By reusing these older units, we are conserving energy and producing reliable, high-quality locomotives that are more fuel efficient and generate less greenhouse gas emissions.
- Our headquarters office tower in downtown Norfolk, Va., the Arnold B. McKinnon building, earned the U.S. Environmental Protection Agency's Energy Star® rating, the national symbol for protecting the environment through energy efficiency. On average, buildings earning the rating use 35 percent less energy than typical buildings and release 35 percent less carbon dioxide into the atmosphere.





- Wick Moorman, Norfolk Southern's chief executive officer, was named Railroader of the Year by *Railway Age* magazine.
- Employees at Norfolk Southern continued to expand on-site recycling programs across our 22-state system. These "home-grown" initiatives are keeping plastic bottles and other recyclables out of landfills and lowering the company's costs of trash disposal.
- For the ninth consecutive year, Norfolk Southern received a TRANSCAER National Achievement Award for our commitment to ensure hazardous chemicals are safely transported across our rail network. TRANSCAER is an acronym for Transportation Community Awareness and Emergency Response.
- The Norfolk Southern Foundation, our charitable giving affiliate, donated more than \$5.6 million in 2010 to organizations supporting its four priorities: providing food and shelter to those in need; expanding educational opportunities for children; helping conserve the environment; and promoting arts and culture.
- We advanced our public-private partnership programs, which are initiatives designed to improve rail freight
  capacity and generate public benefits such as jobs, reduced highway congestion, and reduced greenhouse
  gas emissions. We opened our Heartland Corridor to double-stack container traffic, improving the flow of
  intermodal freight between Virginia's ports and Midwest consumer markets, and we began construction on
  three new intermodal terminals to serve the Crescent Corridor, a 2,500-mile national rail network running from
  the Gulf Coast to Northern New Jersey.
- We assisted with the location of 67 new industries and the expansion of 25 existing industries along our rail network in 2010, representing an investment of \$2.5 billion by our customers.
- We were recognized for our corporate social responsibility achievements in Newsweek's Green Rankings; Corporate Responsibility Magazine's 100 Best Corporate Citizens List; G.I. Jobs magazine's America's Top 100 Military Friendly Employers; Inbound Logistics magazine's 50 Green Supply Chain Partners; and Supply & Demand Chain Executive magazine's 2010 Green Supply Chain Awards.

#### **SUSTAINABILITY:** THE BIG PICTURE

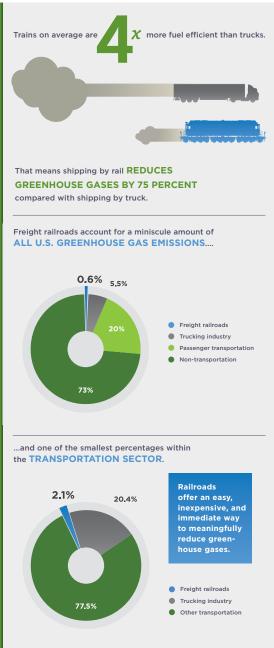
#### Rail's environmental advantage

We believe that Norfolk Southern and the nation's freight rail industry are playing a vital role in reducing overall greenhouse gas emissions in the United States, which has a global effect.

Available evidence clearly demonstrates that rail is the most environmentally friendly way to transport goods over land. An independent study for the Federal Railroad Administration shows that trains on average are 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 latest greenhouse gas emissions data from the U.S. Environmental Protection Agency, for 2009, also reflect rail's environmental benefits. The trucking industry accounted for 20.4 percent, or 365.5 million metric tons, of greenhouse gases emitted by the nation's transportation sector, while freight railroads accounted for 2.1 percent, or 37.2 million metric tons. Overall, trucks generated 5.5 percent of U.S. greenhouse gases from all sources; railroads generated 0.6 percent.





U.S. Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2009*, Tables ES-7, A-111, and A-112

Study for the Federal Railroad Administration

By doing what we do best—transporting customers' freight in a safe, timely, and cost-efficient manner—Norfolk Southern is keeping the economy moving and offering a greener transportation solution.

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



#### **OUR GOAL**

#### Seeking fuel and energy efficiencies

Last year, we set a goal to reduce our emissions of carbon dioxide equivalents per revenue ton-mile by 10 percent between 2009 and 2014. The five-year goal uses our 2009 emissions as the baseline to measure progress.

To achieve the commitment, we have focused on improving the fuel efficiency of our locomotives, the railroad's workhorses and largest source of emissions. It is a comprehensive strategy, ranging from locomotive rebuilds and engine upgrades to trackside technologies and computer software designed to improve the movement of trains across our 22-state network.

These efforts include, but are not limited to:

- Installing LEADER fuel- and performanceoptimization technology on more than 500 locomotives, with another 500 planned.
- Enhancing our locomotive fleet through an aggressive rebuild program of older locomotives that results in like-new units that are more fuel-efficient and generate fewer greenhouse gas emissions.
- Deploying idle-reduction technologies, such as automatic engine start-stop systems and auxiliary power units.
- Continuing enforcement of Norfolk Southern's company-wide idling policy through fuel scorecard ranking and remote audits via wireless technology.
- Expanding use of friction modification initiatives, such as top-of-rail lubrication.

We're also making substantial investments to improve the capacity and efficiency of key rail corridors, including the Heartland and Crescent corridors, another aspect of our emissions-reduction strategy. All of these actions are geared toward optimizing fuel use and operating efficiencies.

ENERGY CONSU	MPTION		
	2008	2009	2010
GALLONS OF DIESEL FUEL	483.8 M	397.3 M	440.1 Million
GALLONS OF GASOLINE	13.1 M	11.4 M	11.7 Million
GALLONS OF PROPANE AND HEATING OIL	2.2 M	2.0 M	2.7 Million
KILOWATT-HOURS OF ELECTRICITY	512 M	468.8 M	440.7 Million
CUBIC FEET OF NATURAL GAS <sup>1</sup>	404 M	622.9 M	372.4 Million

 $<sup>^{\</sup>rm 1}$  2009 increase attributable to temporary switch from coal to natural gas at Juniata Locomotive Shop

ENERGY EFFICIE	NCY		I
	2008	2009	2010
REVENUE TON-MILES PER GALLON DIESEL FUEL	405	404	413
DIESEL FUEL PER MILLION DOLLARS OF REVENUE	45,380 gal	49,860 gal	46,253 gallons
GASOLINE PER MILLION DOLLARS OF REVENUE	1,227 gal	1,430 gal	1,235 gallons
PROPANE & HEATING OIL PER MILLION DOLLARS OF REVENUE	206 gal	248 gal	288 gallons
ELECTRICITY PER MILLION DOLLARS OF REVENUE	48,029 kwh	58,826 kwh	46,319 kwh
NATURAL GAS PER MILLION DOLLARS OF REVENUE <sup>1</sup>	37,987 cu. ft.	78,173 cu. ft.	39,141 cu. ft.
FUEL OIL & NONLOCOMOTIVE DIESEL PER MILLION DOLLARS OF REVENUE <sup>2</sup>	641	2,926	1,330 gallons

 $<sup>^{\</sup>rm 1}2009$  increase attributable to temporary switch from coal to natural gas at Juniata Locomotive Shop

 $<sup>^{2}</sup>$  2009 increase attributable to improved data collection procedures rather than to large increase in consumption

#### **Making Progress**

To reach our 10 percent goal, we need to reduce emissions by three grams of carbon dioxide equivalents per revenue ton-mile of freight by 2014.

Here's how we calculate that: In 2009, our baseline, we transported 158.5 billion revenue ton-miles of freight and produced emissions of 29.96 grams, or 30 grams, of carbon dioxide equivalents per revenue ton-mile. Three grams is 10 percent of 30.

In 2010, we made substantial progress toward our goal. Our trains transported nearly 182 billion revenue ton-miles of

freight, producing 28.8 grams of carbon dioxide equivalents per revenue ton-mile.

	2009	2010
TOTAL SCOPE 1 AND SCOPE 2 EMISSIONS OF CARBON DIOXIDE EQUIVALENTS	4.7 Million metric tons	5.2 Million metric tons
EMISSIONS PER REVENUE TON-MILE	29.96 grams	28.78 grams
TOTAL REVENUE TON-MILES OF FREIGHT MOVED	158.5 B	181.9 Billion
TOTAL RAILWAY OPERATING REVENUES	\$7.9 B	\$9.5 Billion

NORFOLK SOUTHERN EMISSIONS

Compared with the 30 grams in 2009, that is a 3.9 percent reduction-meaning we reached nearly 40 percent of the five-year goal.

We attribute the reduction to improvements in locomotive fuel economy, efforts to make our buildings and railroad facilities more energy efficient, and to operating efficiencies that allowed us to move higher volumes of freight over our network.

We base our emissions-reduction goal on revenue ton-miles because that 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 grows from year to year.





recession, our business picked up significantly over 2009. As a result, we saw an increase in both our revenue ton-miles and in our absolute emissions of carbon dioxide equivalents. While emissions per revenue ton-mile decreased, our absolute emissions increased to 5.2 million metric tons, from 4.7 million metric tons in 2009.

Our business activity, however, rose at a much greater rate than emissions—a nearly 15 percent increase in revenue ton-miles vs. a 10 percent increase in total carbon emissions. The difference, at least in part, is the result of efforts to improve fuel and energy efficiency.

Looking at the bigger picture of freight transportation, shifting more goods to rail makes sense from an environmental perspective. While locomotive emissions may increase as railroads run more trains to accommodate business growth, total carbon emissions will decrease on a regional, national, and global basis because trains are on average four times more fuel efficient and emit significantly lower levels of greenhouse gases than trucks.

That will help us all breathe easier.

#### **Fuel Economy Gains**

A key to reducing our greenhouse gas emissions is improvement in fuel efficiency. We have made significant gains.

In 2010, our revenue trains moved a ton of freight an average of 413 miles on a single gallon of diesel fuel, a 2.2 percent improvement over our 2009 average of 404 miles. Based on revenue ton-miles and diesel fuel usage in 2010, the gain in fuel economy translates into diesel fuel savings of 10.2 million gallons and reduced emissions of 104,924 metric tons of carbon dioxide equivalents.

Since 2007, the first year we reported our fuel intensity, we have improved the fuel efficiency of our locomotive fleet by nearly 5 percent. That represents a diesel fuel savings of 21.6 million gallons and an emissions reduction of 222,067 metric tons of carbon dioxide equivalents.



\*grams of carbon dioxide equivalents per revenue ton-mile

#### 2010 CARBON FOOTPRINT

#### Locomotive fleet is largest source

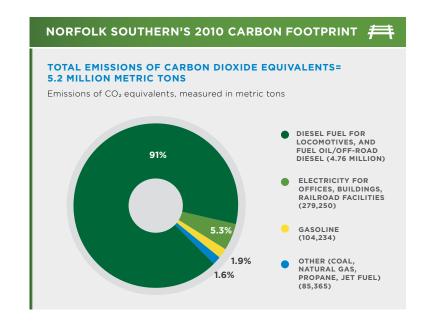
In 2010, Norfolk Southern Corporation's business activities generated 5.2 million metric tons of carbon dioxide equivalent emissions while delivering more than 181 billion revenue ton-miles of freight for customers.

Our total emissions include those generated by Norfolk Southern Corporation's primary operating subsidiary, Norfolk Southern Railway, and other operating subsidiaries.

The railroad's diesel-burning locomotive fleet, which operates in road, local, and yard service, generated 86 percent of the emissions, or 4.5 million metric tons. That includes 352 metric tons of methane and 114 metric tons of nitrous oxide.

Our second largest source of emissions, at 279,250 metric tons, came from electricity usage at office buildings we own or lease and at other railroad facilities, including terminals, yards, and shops. Those emissions include 4,771 metric tons of methane and 4,600 metric tons of nitrous oxide.

We calculated our emissions in accordance with the Greenhouse Gas Protocol Initiative's Corporate Accounting and Reporting Standard. The GHG Protocol is the most widely accepted international accounting tool for governments and businesses to quantify and manage greenhouse gas emissions.



Under those guidelines, we report Scope 1 and Scope 2 emissions. Scope 1 emissions are generated directly by our business operations, such as emissions from diesel fuel burned by locomotives and from other fossil fuels consumed by company vehicles and machinery. Our Scope 2 emissions arise from our electricity usage, but actually are generated by the utility companies that supply us with power.

We calculated Scope 1 emissions by multiplying the amount of fuel consumed by the appropriate emissions factor published by the GHG Protocol. Similarly, we derived Scope 2 emissions by multiplying electricity use by the appropriate GHG Protocol emissions factor.

The railroad did not calculate so-called fugitive emissions, including hydrofluorocarbons and sulfur hexafluoride, because of insufficient data. Any potential release of those gases is marginal and not considered material to our operations.

#### **EMISSIONS REDUCTION**

#### Key elements of our strategy

Norfolk Southern is looking at all aspects of the railroad's business operations to reduce environmental impacts. Because locomotives generate 86 percent of our greenhouse gas emissions, we are concentrating efforts on technologies and techniques to improve our locomotive fleet's fuel economy and reduce emissions.

For example, we are working on initiatives to improve network and system efficiencies, improve line-of-road train handling, and reduce engine idling. We have launched an aggressive in-house locomotive rebuild program that doubles service life for locomotives with like-new engines that are more fuel-efficient and cleaner running. In addition, we are purchasing new, more fuel-efficient locomotives.

Here's a look at some of our major programs:

#### Improving train handling

Starting in 2006, Norfolk Southern has pioneered the development of LEADER, or Locomotive Engineer Assist Display Event Recorder. We consider LEADER to be our flagship fuel-efficiency project. It has great potential to help us conserve fuel, reduce emissions, and lower the cost of maintaining both locomotives and track infrastructure.

LEADER is an onboard, GPS-based computer system that prompts locomotive engineers with real-time information on optimum throttle, speed, and brake settings to achieve maximum fuel efficiency. The system takes into account the train's length and weight and provides recommendations on how to operate the train based on hilly terrain, curves, and other track conditions.

In fall 2010, our Northern Region became the first equipped with infrastructure needed to run LEADER-assisted trains across the entire territory. Plans are to implement LEADER on our other two operating regions over the next two years.

Early results are promising. If we are able to replicate the fuel-efficiency results of LEADER pilot projects on our Northern Region's main line between Chicago and Croxton, N.J., we could achieve average systemwide improvements in gallons per thousand gross ton-miles of around 6 percent.

As of spring 2011, we had equipped about 530 of our road locomotives, or nearly 23 percent, with the onboard LEADER computer system; we plan to double that number during the next year. More than 800 engineers had been certified to use the system by early 2011.

#### Rebuilding enhanced locomotives

Locomotive knowledge is a core competency at Norfolk Southern. Nowhere is this better reflected than in our locomotive capital rebuild program.

Several major rebuilds are under way at our Juniata Locomotive Shop in Altoona, Pa. The program involves giving new life to 25- to 30-year-old locomotives that otherwise would be retired and sold for scrap. As part of the rebuilds, we reuse the steel platforms, wheel assemblies, traction motor frames, and engine blocks. In the process, we're adding another 20 to 25 years of reliable, productive life to an asset while improving fuel efficiency and lowering emissions.

In addition, reusing the old locomotives reduces greenhouse gas emissions associated with manufacturing new equipment. Although we have not yet quantified the emissions reduction associated with our rebuild program, a recent study on remanufactured diesel engines reported that reconditioning and reusing old parts consumed 75 to 98 percent less energy than manufacturing new parts, depending on the component.

One of our industry collaborators, Caterpillar Inc., which has rebuilt older construction and mining equipment for more than 25 years, reports in its 2010 Sustainability Report that rebuilding the machines requires 50 to 60 percent less energy by reusing 85 to 95 percent of materials from the original product by weight.

We also are experiencing a substantial economic benefit. We're spending about half as much on rebuilding an older locomotive as we would on purchasing a new replacement unit.

"This is recycling at its greatest. We're taking 25to 30-year-old locomotives that are pretty much past their useful lives and basically making them like new again. They are more fuel-efficient and cleaner burning, and we are doing it at half the cost of buying new locomotives."

DON FAULKNER, GENERAL SUPERINTENDENT, JUNIATA LOCOMOTIVE SHOP





#### Here's a brief look at three of the rebuild projects:

THE SD60E: These road locomotives are rebuilds of 1980s-era SD60 units. The E stands for "enhanced." Three of the biggest advancements are the introduction of electronic fuel-injection equipment, a motordriven air compressor, and a dual circuit engine-cooling system, all of which contribute to improved fuel efficiency and reduced emissions. The cooling system design is novel enough that we have applied for a patent, a tribute to our talented work force and representative of the innovative thinking we encourage and embrace. As of early 2011, we had produced three of the 4,000-horsepower units, with plans for a dozen more by year end. Over a 10-year build out, we expect to produce 240 of the SD60E's, anticipating savings of \$275 million compared with the cost of buying new locomotives.

THE SD40E: These locomotives, used in yard and local service and as "helper" engines in mountainous terrain, are rebuilds of 1980s-era SD50 six-axle units. Our first SD40E went into service in 2008, and was a building block for our SD60E road program. We had 37 in service as of early 2011, with plans for 44 by year end. These 3,000-horsepower units, featuring a new microprocessor control system, have become reliable workhorses, ranking second on our locomotive fleet reliability index, a calculation based on locomotive engineer trouble reports.

THE GP40-2 MOTHER/SLUG SETS: These combo units replace GP38-model locomotives dating to the 1970s and '80s. Slugs are locomotives that have traction motors for propulsion but no diesel engines. They get electrical power from an adjacent four-axle GP40-2 "mother" locomotive. Together, the slug and GP40-2, outfitted with a reconditioned 3,000-horsepower engine, can do the work of two 2,000-horsepower GP38-2 locomotives. The mother/slug sets are ideal for switching operations because they can pull as much freight as a road locomotive at slow speeds. Compared with two GP38-2 locomotives working in tandem, the mother/slug sets consume 40 to 45 percent less fuel. The engine meets U.S. Environmental Protection Agency Tier O Plus emissions standards, resulting in fewer emissions of hydrocarbons, oxides of nitrogen, and particulate matter. In 2010, we installed 12 mother/slug sets and plan to install as many as 40 additional sets through 2013.



#### Idling engines less

Norfolk Southern has developed a program of initiatives to conserve fuel and lower greenhouse gas emissions by reducing the amount of time locomotive engines run on idle.

By the end of 2010, 63 percent of our locomotive fleet was equipped with some form of idle-reduction technology. During 2010, we equipped 269 locomotives with automatic startstop systems, bringing the total number to 1,797 locomotives. The start-stop technology either shuts down or starts an engine without operator action based on engine parameters monitored by a microprocessor-based system. Our plan is to install start-stop systems on the entire fleet by end of 2014, far ahead of any regulatory mandate.

We also had outfitted 586 locomotives with auxiliary power units by end of 2010. These power units eliminate the need to idle engines because they maintain vital systems while the engine is shut down, including proper engine temperature in cold weather.

In addition to technology, we continue to enforce a company-wide idle reduction policy. Employees in shops and terminals shut down locomotives unless there is an operational need for idling. To monitor progress, we have created a fuel scorecard used to rank our 11 operating divisions for their contributions toward fuel conservation. That program is documented through physical audits and wireless technology that allow us to monitor locomotive use.

#### Monitoring train performance

Approximately 1,400 of our locomotives now are equipped with a Wireless Event Recorder Information System, or WERIS. The onboard computer system monitors train-handling performance for specific train service.

The WERIS system wirelessly and automatically downloads data to NS computer servers in our Atlanta office. The information is reviewed to ensure that locomotive engineers are in compliance with company operating rules. WERIS captures instances in which engineers may have applied higher amperage than necessary or used excessive braking, which can be costly in terms of unnecessary fuel burn and equipment maintenance. The technology has proven to be a useful coaching tool to help improve operator performance. Eventually, we expect to use WERIS data to create a fuel scorecard that engineers can use as a baseline to improve fuel efficiency on the routes they run.

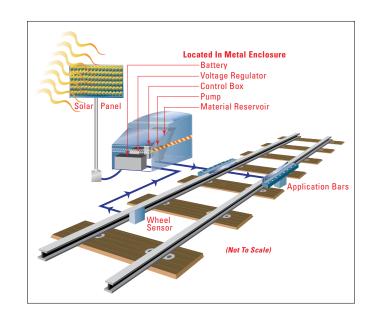
#### Improving wheel/rail interaction

Norfolk Southern has pioneered the use of top-of-rail friction modification technology. The track wayside system dispenses a toothpaste-like lubricant on top of both rails as a train approaches, reducing friction between rail and wheels. In turn, that reduces the energy needed to pull a train and results in less wear and tear on the track and car wheels.

The lubricant-dispensing machines are powered by solar panels, which saves on power costs and enables us to install the systems in remote areas that lack conventional power sources.

By mid-2011, we had installed 637 top-of-rail systems—270 in 2010—on more than 1,000 miles of track. By end of 2012, top-of-rail will be installed on more than 12 percent of our most mountainous track miles. Early results indicate fuel savings of approximately 2 percent are possible on rail corridors equipped with the system.

In a related fuel-savings initiative, 100 percent of our rail car wheels are being equipped with low-torque roller bearings at wheel renewal change-outs. In 2010, we applied 35,104 lower-torque bearings to rail cars and 5,954 to locomotives. The bearing manufacturer estimates fuel savings of 1 to 2 percent over the bearings they replace.







#### Using more distributed power

We have begun to expand our use of distributed power, a technique that involves placing additional locomotives at intermediate points on the train to distribute pulling power. The lead locomotive remotely controls the other locomotives.

We are using the technique primarily on heavier coal trains as a way to reduce train drag and lateral wheelto-rail forces, achieving estimated fuel savings of 1 to 3 percent. By the end of 2010, we had equipped 252 locomotives with the capability to operate as leading or trailing distributive power as part of an ongoing implementation program.

#### Improving train dispatching

We are in the process of implementing a next-generation dispatching system designed to improve the overall speed and capacity of trains across our network. As of mid-2011, the Unified Train Control System, or UTCS, was operating on seven of 11 divisions, offering dispatchers an improved, streamlined way of managing signals, providing clearance for track maintenance work, and performing everyday dispatch duties.

Starting in 2010, we introduced RailEdge Movement Planner, a software system that enables dispatchers to coordinate train traffic movements across the network. Movement Planner was installed on signalized sections of three divisions as of mid-2011, and plans are to expand the technology to three more divisions by year end.

We worked with industry partner GE Transportation to develop the Movement Planner system, which will help us move trains faster, safer, and more efficiently across our network. Customers will benefit by improved ontime deliveries, and the environment will benefit because we will be able to better pace the movement of trains, eliminating unnecessary fuel burn and emissions.

#### **Buying new locomotives**

During 2010, we purchased 42 new fuel-efficient AC locomotives and have budgeted funds to purchase at least 50 additional AC locomotives in 2011. The AC units, which power traction motors by alternating rather than direct current, provide superior tractive effort that is beneficial to our heavy-haul commodities, including our coal and grain business.

In such applications, two AC locomotives can perform the work of three DC units, significantly improving locomotive productivity and delivering all of the benefits associated with reducing the number of diesel engines used in operations. The new AC units meet EPA-mandated Tier II emissions standards. By the end of 2010, we had added 474 Tier II-compliant locomotives to the fleet.

#### **Exploring alternatives**

With an eye on the future, we are developing several projects that involve alternative fuel sources and experiments with nonconventional locomotives.

Among the most promising:

- We unveiled the NS 999 in fall 2009, a first-of-its-kind electric switcher locomotive that is powered entirely by batteries and runs with zero point-source emissions. Currently, we are working with industry partners on a second-generation lead-carbon battery system. We have applied for a patent on the technology developed to manage the pioneering battery system. The NS 999 features a regenerative braking system that captures and stores energy when the locomotive's traction motors are applied, acting as axle-driven generators that help recharge the batteries during operation. In addition, we are working on a battery-powered road locomotive that would be paired with a diesel-electric locomotive to supply tractive power on line of road.
- We worked with industry partners Progress Rail and Caterpillar to develop the PR43C, a six-axle road locomotive that is powered by two diesel engines designed to improve fuel efficiency and reduce greenhouse gas emissions. A 700-horsepower engine runs the locomotive at lower throttle notches and while idling; a 3600-horsepower engine begins running when the need for power increases. The engines operate in tandem when needed to generate the full 4300 horsepower. In fall 2010, after a year of testing, we ordered four more of the PR43C locomotives. They feature an advanced and improved control system that individually controls each of the locomotive's six traction motors. This is expected to improve pulling power, enabling the locomotive to perform more work without burning more fuel. An added environmental benefit: the PR43C is being remanufactured from older SD50 and SD60 frames.
- We worked the past year with locomotive maker Electro-Motive Diesel to test various blends of biodiesel fuel, a home-grown, renewable energy source that could help reduce reliance on foreign oil. Based on that experience, we plan to begin using a vegetable-based biodiesel blend of slightly more than 10 percent in locomotives operating out of Chicago and Decatur on our Illinois Division. This will enable us to take advantage of an Illinois law that eliminates payment of the state's 6.25 percent fuel tax on fuels containing more than 10 percent of biofuels. We also plan at least six more months of field testing biodiesel with EMD to monitor longer-term effects on engine performance.



# **OUR ENVIRONMENTAL** PERFORMANCE

Green connections: Norfolk Southern is strengthening our connections with communities and the environment to ensure the impacts we leave will be positive for generations to come. We strive to be the industry leader in fuel conservation, emissions reduction, efficient energy use, recycling, and environmental partnerships.

#### A DEEPER SHADE OF GREEN

Wick Moorman, our CEO, talks often about Norfolk Southern's commitment to sustainability. On a sun-baked field in the Mississippi Delta, he showed what that means.

With shirt sleeves rolled up on a hot June day, Moorman helped plant a ceremonial Nuttall oak tree, launching a five-year, \$5.6 million NS initiative to restore 10,000 acres of former woodlands in the ecologically important Mississippi Alluvial Valley.

Our investment will support the planting of 6.04 million native hardwoods and cottonwoods, promoting revitalization of the Delta Valley's environmental health, preserving a critical commercial corridor on the Mississippi River, and bringing long-lasting benefits to a region served by Norfolk Southern.

We are collaborating on the project with GreenTrees, a privately managed reforestation and carbon capture program with a goal to reforest 1 million acres in the Delta. Much of the land was cleared decades ago for agricultural use but currently is underused or marginally productive.

Blair Wimbush, our vice president real estate and corporate sustainability officer, describes the initiative as a "triple play" because it carries environmental, economic, and social benefits-the three pillars of our overall sustainability strategy.

We view the project as a prime example of how the railroad aims to balance our business imperatives as a publicly traded corporation with the need to conserve natural resources. We recognize that our business activities have environmental consequences and are committed to taking significant steps to mitigate those impacts.

"Our company is 180 years old; we're a long-cycle business. This kind of sustainable, long-term, long-lasting initiative is exactly what we want to do."

WICK MOORMAN. **CHIEF EXECUTIVE OFFICER** 



#### **OUR CONSERVATION STRATEGY**

The idea is compelling—what's good for the environment is good for business. The founders of GreenTrees, the leading reforestation program on private lands in the United States, call it conservation capitalism.

Our decision to invest in reforestation of the Mississippi Alluvial Valley is a model for how the railroad plans to invest in conservation initiatives to temper the environmental impacts of our business activities. These conservation investments will enhance the impact of our broader carbon mitigation strategy to reduce greenhouse gas emissions.

Eventually, we hope to recoup our \$5.6 million investment in the GreenTrees initiative. Over time, the 10,000 acres of woodland are anticipated to generate 1.12 million tons of carbon-offset credits that can be sold to companies or individuals interested in offsetting their emissions. We plan to register the carbon credits with the American Carbon Registry, a nonprofit carbon registry that handles over-the-counter transactions in the voluntary U.S. carbon-offset market.

Notably, however, carbon offsets generated by this initiative will not be used in calculating progress on meeting our greenhouse gas emissions reduction target. Instead, we will accomplish our goal through fuel- and energy-efficiency initiatives.



Norfolk Southern's collaboration with GreenTrees will generate benefits that extend well outside the company to multiple stakeholders, including farmers and family landowners, surrounding residents, migratory birds, and other wildlife.

Landowners will receive lease payments for use of their land, giving them an economic incentive to reforest their property rather than sell it for development or maintain it in its current use. Residents and local areas will benefit from improved air and water quality, in addition to job opportunities over the project's duration. The trees will provide vital food and habitat for migratory birds, which suffered from deforestation of the Delta Valley.

This is our idea of corporate sustainability: We are restoring a natural resource and growing an asset that has environmental benefits, and at the end of the day, we aim to earn a return on our investment. It's about a company earning profits to provide good jobs, economic opportunity, and shareholder value, while at the same time taking responsibility to minimize the environmental effects caused by business activities.



"We're mindful that we can do something beyond fuel-efficiency gains to have a positive impact on the environment and the communities we serve. We've decided to make reforestation a central part of our carbon mitigation strategy. That could include collaborating on other reforestation activities with nongovernmental and governmental organizations."

BLAIR WIMBUSH, VICE PRESIDENT REAL ESTATE AND CORPORATE SUSTAINABILITY OFFICER





#### WHAT OTHERS ARE SAYING ABOUT OUR GREENTREES INITIATIVE:

"I could not be more impressed with Norfolk Southern's decision to do this. This contributes directly to our goals of managing the river better."

NORMAN BRUNSWIG, EXECUTIVE DIRECTOR AUDUBON SOUTH CAROLINA. The Audubon Society has promoted restoration of the Mississippi River and its flood plains for the past decade

"Reforesting an area of the Mississippi Alluvial Valley flood plain says a lot for conservation capitalism. It allows landowners greater flexibility and economic opportunities than some of the conventional techniques."

DR. TED LEININGER, PROJECT LEADER OF THE CENTER FOR BOTTOMLAND HARDWOODS RESEARCH in Stoneville, Miss., which helped develop the technique of interplanting cottonwoods and hardwoods as a means of converting crop lands to forest.

"When a farmer tells me, 'This is a good program, I'm doing well,' that's a pretty strong statement. It's the most successful carbon sequestration program in the United States because it works."

CHARLIE MORGAN, STATE FORESTER FOR MISSISSIPPI

"To the business community at large, when they look at Norfolk Southern, the first thing they say is this is a big, successful company that didn't get that way by foolishly spending money. They're addressing their carbon footprint and looking at it in terms of economics, not just as a philanthropic opportunity."

CAREY CRANE, FOUNDING PARTNER, GREENTREES

#### REDUCING ENERGY USE

Our use of electricity-including lighting, heating, and cooling our office buildings and shops-ranks as the railroad's second largest source of greenhouse gas emissions. In 2010, the electricity generated by utilities to power our facilities accounted for 5.3 percent of our total emissions of carbon dioxide equivalents.

As part of our carbon-reduction goal, we have developed strategies to lower energy consumption. Some of our initiatives, such as a systemwide lighting upgrade project, already are generating significant reductions in cost and greenhouse gas emissions. Others, including plans to install more energy-efficient heating and air-conditioning systems, are in the implementation stage.

Together, the efforts will help decrease the size of the company's environmental footprint and conserve energy.

"Norfolk Southern is committed to increasing energy efficiency in all our buildings and facilities and incorporating sustainable designs and materials in new construction projects," said Blair Wimbush, vice president real estate and corporate sustainability officer.

#### Saving money, reducing emissions

Aiming to cut costs and conserve energy, Norfolk Southern in late 2007 settled on a plan to equip 600 offices, shops, and facilities in 300 locations with new technologically advanced fluorescent lamps.

That's no small undertaking. Through 2010, the work has involved retrofitting or installing around 87,000 light fixtures—and the project is only 75 percent complete.

The \$10-million investment is producing results. In 2010, the railroad estimates that the longer-lasting, more energy-efficient lamps resulted in energy savings of \$4.3 million. Combined with savings generated from upgrades completed in 2008 and 2009, the railroad conservatively estimates cumulative savings of nearly \$7.5 million—enough to return our current costs on the project.

"We support President **Obama's Better Building Initiative to make America's** commercial buildings more energy and resource efficient

**BLAIR WIMBUSH. VICE PRESIDENT REAL ESTATE AND CORPORATE** SUSTAINABILITY OFFICER

over the next decade."

The environment and communities also are benefitting. By our estimates, the lighting upgrade has reduced the railroad's energy consumption by more than 50 million kilowatt hours and has reduced carbon dioxide emissions by 29,415 metric tons annually. The overall reduction in emissions, including nitrogen oxide and sulfur dioxide, is equivalent to removing about 4,900 cars from the highway.

Our employees benefit, too. The metal halide bulbs we now use to light outdoor yard facilities emit a clean, bright light that's easier on the eyes than the yellowish light of the sodium bulbs they replaced.

#### Our headquarters earns Energy Star rating

Our 21-story Arnold B. McKinnon headquarters, with its gleaming green-glass exterior, adds a distinctive look to the downtown skyline of Norfolk, Va. While not as easy to see, the 311,000-square-foot office tower is just as green inside.

In 2010, the building, opened in 1988, earned the U.S. Environmental Protection Agency's ENERGY STAR® rating, the national symbol for protecting the environment through energy efficiency.

Commercial buildings that earn the rating perform in the top 25 percent of similar facilities nationwide for energy efficiency. On average, they use 35 percent less energy than typical buildings and release 35 percent less carbon dioxide into the atmosphere.

We improved the energy performance of the 23-yearold building largely through a lighting replacement project that took advantage of improvements in fluorescent lamp technology. To further conserve lighting costs, the building was outfitted with occupancy sensors and photocells that automatically cut off lights in work spaces that are unoccupied.

In addition, we upgraded the building's heating, ventilation, and air conditioning system, including installation of variable frequency drives, high-efficiency economizers, and high-efficiency boilers.

The headquarters project is part of a larger \$10 million initiative to replace and upgrade lighting across the railroad's 22-state system.

#### The right heating and cooling

During 2010, Norfolk Southern began putting into place a program to upgrade heating and cooling systems in buildings, shops, and facilities across our system.

The 2011 capital budget includes approximately \$600,000 for 40 HVAC installations. The program will target the replacement of systems that are at least 15 years old or that are improperly sized for the space they are heating and cooling.

While the cost savings and environmental benefits will not be as dramatic as the lighting upgrade, we project that the HVAC upgrade will generate efficiency gains of 12 to 14 percent and reduce the risk of high-dollar emergency repair or replacement costs due to failing systems.

In a 2010 pilot project at our Georgetown, Ky., intermodal facility, we replaced a five-ton heat pump with a high-efficiency four-ton pump, resulting in savings of 2.24 kilowatts per hour of operation. We achieved similar savings at our Roanoke, Va., welding lab by replacing a three-ton heat pump with a highefficiency two-ton pump.

#### Corridor projects feature green design

As work continues on our multi-state Crescent Corridor, Norfolk Southern is striving to minimize the program's environmental impacts while maximizing operational efficiencies.

We have made a commitment to follow LEED (Leadership in Energy and Environmental Design) Certification standards in the design and construction of three administrative buildings serving new regional intermodal facilities in Birmingham, Ala., Memphis, Tenn., and Greencastle, Pa.

LEED certification recognizes the importance of creating, building, and managing landscapes that support environmental, economic, and human needs. Construction of the facilities is under way with opening scheduled for 2012.

"They feature the best practices in building materials and design to use less energy, water, and fewer natural resources," said Ken Hearn, Norfolk Southern manager architectural services.

"Getting people to change habits is the challenge, but everybody's positive about it. Taking care of the environment is important for people personally and for the company. We need to make changes and be more environmentally friendly."

TOM TEFFETELLER, CHIEF DISPATCHER, HARRISBURG





In addition, our Birmingham intermodal facility, projected to bring thousands of jobs to central Alabama over the next decade, has been selected to participate in the Sustainable Sites Initiative (SITES) Pilot Program. The national initiative seeks to encourage sustainable practices such as buffer zones, storm water management, green space, and noise mitigation throughout each phase of a landscape's design, construction, operation, and maintenance.

SITES certification will complement the LEED certification for the facility's main administration building, and it demonstrates our commitment to environmental leadership.

#### RECYCLING EFFORTS

#### Employees take the lead

At Norfolk Southern, environmental sustainability is more than a corporate slogan—it's a responsibility that many of our employees readily accept.

Nowhere is that more evident than in the growing number of recycling programs employees have initiated at workplaces across our system.

Employees at our Harrisburg, Pa., terminal set the standard. Their determination in late 2009 to bring recycling to the terminal's three yards has paid off: The terminal went from simply disposing of waste products in trash cans to recycling about 23 tons of material in 2010. The effort also significantly reduced the terminal's waste collection bills.

"It's nice to know that we're able to keep that much out of landfills and incinerators," said Tom Teffeteller, chief dispatcher, Harrisburg.

With that success, the new Harrisburg Green Team is promoting recycling across the entire division, which encompasses a five-state area in our Northern Region. Team members are urging train and engine crews to take recycling bags on locomotives and are promoting the use of recyclable dishes, instead of Styrofoam. In addition, the team developed a guidebook to help employee work groups systemwide promote recycling in their areas.

One of Harrisburg's main recycling projects revolves around the plastic water bottles that the company provides for transportation crews. Before recycling began, these bottles were disposed of in trash containers or sometimes left in the yards. Borrowing an idea from employees at our Knoxville, Tenn. terminal, the Green Team asked employees to label used water bottles with their name and employee number and place them in large cardboard boxes. Employees whose bottles are drawn in a periodic "Bottle Lotto" win prizes such as shirts, hats, and flashlights from the company catalog. In April 2011, a bottle lotto held in observance of Earth Month netted 16,000 plastic bottles.

Since the Harrisburg successes, employees on other divisions across the system have launched recycling programs.

In Georgia, our Savannah Terminal's Dillard Yard has launched its own bottle lotto rewards program. By recycling bottles in collection bins, employees earn points they can redeem for prizes.

A bottle lotto event at Shaffers Crossing in Roanoke, Va., collected more than 1,400 gallons of recycled bottles.

Our Piedmont Division began a recycling program in spring 2011. "We're filling up recycling bins to the brim every week and hope to reduce the amount of times we have trash collection," said Ed Hatton, office manager, Piedmont Division in Greenville, S.C.

"People can feel good about knowing that these items are not just ending up in a landfill."

MEGAN GARRY,
MANAGER CORPORATE
SUSTAINABILITY





#### **EMPLOYEES MAKING A DIFFERENCE:** A lot of bottles get recycled

David Cass, a locomotive engineer at our Knoxville, Tenn., yard, gets credit for one of the most creative initiatives for going green. Sparked by the youthful memory of returning drink bottles for a nickel deposit, Cass devised a novel plan to encourage yard employees to recycle plastic water bottles.

He called it "Water Bottle Lotto," and it was an instant success. It started in Knoxville in 2009 and since then has spread to rail yards and terminals across our system, resulting in the recycling of thousands of companyprovided water bottles.

Before the lotto was introduced in Knoxville, many of the bottles were tossed in trash cans and sometimes ended up in the yard, where they posed a tripping hazard. To motivate co-workers to better police the yard, Cass came up with the idea to award prizes through a lottery system. Employees initial bottles before placing them in clear recycling bags. The more bottles an employee collected, the better chance of winning a prize, such as Norfolk Southern pens or key chains.

Before a series of lottery drawings were held, Knoxville employees recycled more than 7,000 of the bottles. "Even seasoned railroaders who had never picked up a gum wrapper were picking up bottles," Cass said.

Cass estimates that about 95 percent of the water bottles distributed at the yard now are recycled. For his ingenuity, Cass earned a SPIRIT Award, a recognition the company created for employees who go above and beyond their normal duties to help the company save money, operate more efficiently, or improve performance.

Soon, the recycled bottles may make another appearance at the yard-this time as clothing. A Knoxville firm that makes synthetic cloth from bottles has approached the yard about using the bottles to make workers' reflective safety vests. "We'll be wearing our bottles," Cass said.

#### E-waste events are popular

It's not every day that a large corporation helps its employees clean out their garages, attics and basements, but that's what Norfolk Southern has done through its Consumer Electronics Recycling Events.

Launched in our Atlanta office in May 2010, the event gave employees opportunities to bring in old cell phones, computers, laptops, keyboards, VCR and DVD players, small appliances, fax machines, and other obsolete small electronics. And they did-more than a ton.

The event was so successful that a second was held in the fall to include employees at our Norfolk and Roanoke offices as well as in Atlanta. Recycling partner Recycletronics collected nearly 4 tons of electronic waste during that event.

For employees who still had outdated electronics to recycle, a third e-recycling event was held in April 2011. That event expanded to include a fourth location for employees at our Harrisburg, Pa., terminal. Almost 3 tons of electronics were collected at all four locations.

Recycletronics breaks down donated items into separate components to be processed into metal or plastic and made into new products. Based in Atlanta, Recycletronics employs adults who face mental or physical barriers to traditional employment.

Jeff Newbill, senior designer, Atlanta, first brought Recycletronics to NS several years ago to pick up surplus electrical equipment. Last year, as part of the company's sustainability initiatives, Norfolk Southern signed a contract with Recycletronics.

"We're saving many tens of thousands of dollars in disposal costs per year," Newbill said. "Recycling doesn't cost Norfolk Southern anything, and Recycletronics credits us for collection of the e-waste."





## EMPLOYEES MAKING A DIFFERENCE: Going electronic reduces paper use

At one time, three large trash bags filled with paper forms cluttered the Lake Division Train Dispatch Center by the end of each day.

Dispatcher **Christopher C. Wenge**r changed all that. Aiming to increase efficiency as well as reduce paper waste, Wenger created 14 electronic forms that replaced the paper forms used to document train operations. This has allowed the dispatch center and district and terminal offices to communicate through email about everything from signal problems to train emergencies.

Instead of making handwritten comments, employees input their remarks onto the electronic form. Transmitting the information electronically gives multiple individuals the same information in a timely manner, saves paper, and helps reduce our impact on the environment.

"This is a lot faster and a lot less wasteful," Wenger said. Using Microsoft Infopath, he has tweaked the forms as new technology has come out.

Sustainability is rapidly spreading through the dispatch center. Dispatchers now are using both sides of paper for faxes and most of the center's Styrofoam cups have been replaced with mugs.

"It's not a huge amount of money saved," Wenger said, "but every little bit adds up."

#### Intermodal begins recycling effort

Employees in intermodal operations are taking the initiative to recycle batteries from handheld equipment used to scan container trucks entering rail terminals. Their environmental stewardship has extended to our Norfolk headquarters building, where Intermodal Operations is based.

Since 2010, employees have collected batteries used in office equipment to support terminal operations. The batteries are packaged and sent to a facility where they are recycled into scrap metal or new batteries. Employees even bring in old batteries from home for proper disposal.

"Norfolk Southern has a commitment to being environmentally friendly," said Melvin Jordan, manager intermodal and automotive communications systems. "The battery recycling program demonstrates this commitment to participating in a recycling program at all of our Intermodal terminals and supporting global sustainability."

#### Reducing, reusing, and recycling

Whenever possible we look for opportunities to be more environmentally responsible in our operations, from our use of paper in office locations to how we handle and dispose of shop material in our field locations.

Across our system, we use recycled materials, such as paper and packaging. In 2010, 16 percent of the paper, packaging, and office supplies we purchased included recycled or recovered materials. That increased from 15 percent in 2009, and from 11 percent in 2008.

We also recycle used oil from our major locomotive shops. Before we dispose of oil filters, we crush them to remove the oil for recycling and to reduce waste going into landfills.

At our Chattanooga shop, for example, we reclaimed 13,906 gallons of locomotive engine oil in 2010 for reuse. Chattanooga sells the locomotive lubricating oil not reclaimed to recycling companies that filter and refine it for reuse.

MATERIALS REC	YCLED		-
	2008	2009	2010
CROSSTIES USED FOR ENERGY RECOVERY	1.4 M	1.8 M	2.25 Million
CROSSTIES SOLD FOR LANDSCAPING	626,000	563,000	626,000
CROSSTIES REUSED INTERNALLY	314,000	301,000	343,000
TONS OF METAL RECYCLED	167,440	92,590	94,469
TONS OF SCRAP STEEL RECYCLED	214,000	210,069	183,665
POUNDS OF BATTERIES RECYCLED	779,724	1,060,120	1,023,524
NS RECYCLING EF THESE THINGS OU			43
	2008	2009	2010
POUNDS OF LEAD	<b>2008</b> 566,920	<b>2009</b> 709,592	2010
POUNDS OF LEAD			

#### **EMPLOYEES MAKING A DIFFERENCE:**

#### Going green, saving money

Mailing 21,000 paystubs every two weeks to Norfolk Southern's union employees was costly to the company and the environment. To reduce expenses as well as Norfolk Southern's carbon footprint, Gregory Ward, manager mail and reprographic services, Atlanta, worked with our payroll accounting and information technology office to develop electronic paystubs.

> The result: Employees can still elect to receive their paystubs in the mail, but the company now prints only 1,100 paystubs every two weeks, saving \$240,000 annually in printing and mailing costs.





#### Connecting with partners on sustainability efforts

Norfolk Southern voluntarily partners with government on all levels, the communities we serve, customers, and other stakeholders to improve and promote the safety and environmental and economic benefits of transporting goods by rail.

Here's a look at a few of them:

**GOVERNMENT.** Along with other freight transporters, we are a partner in the U.S. Environmental Protection Agency's SmartWay Transport program. As part of the partnership, we have established an action plan and a set of goals to improve fuel efficiency and reduce greenhouse gas emissions. We provide the EPA with an update every year outlining progress on our goals.

**CUSTOMERS.** We developed our own carbon footprint analyzer—what we call the <u>Green Machine</u>—to demonstrate how shippers can reduce their own carbon footprint by transferring freight to rail. Shippers can compare the greenhouse gas emissions of rail vs. highway over specific routes. The calculator shows how many automobiles would have to be taken off highways, and how many trees would need to be planted, in order to achieve air quality improvements equivalent to those offered by greater use of rail.

**TRUCKING PARTNERS.** In our intermodal business, trucking companies are among our largest customers. As part of efforts to increase their efficiency, we have been installing automated gate systems that feature digital cameras and scanning equipment that automatically identifies arriving or departing freight containers. With improvements such as this, we have slashed dwell time for dray truck drivers by a third—to 22 to 24 minutes from 36 minutes in 2005. Over a year, those extra 12 to 14 minutes per truck result in millions in dollars in savings for the trucking companies and substantial reductions in fuel use and emissions.

**BUSINESS LEADERS.** We were the first railroad member of SEE Change (Society, Environment, Economy), launched in 2005 to promote better business and a better world by Business Roundtable, an association of chief executive officers of leading U.S. companies totaling nearly \$6 trillion in annual revenues and more than 12 million employees. In Business Roundtable's Sustainability Progress Report 2011, more than 90 CEOs, including Norfolk Southern's Wick Moorman, reaffirmed their commitments to sustainability. The report is available at <a href="http://businessroundtable.org/studies-and-reports/innovating-sustainability-2011-report">http://businessroundtable.org/studies-and-reports/innovating-sustainability-2011-report</a>

**COMMUNITIES.** We work with local government officials to reduce impacts of locomotive operations on residential neighborhoods, including noise mitigation. For example, we work with communities to establish "quiet zones" to limit the use of locomotive horns in certain areas. Based on federal regulations that permit such quiet zones, we have worked with local officials to establish 31 on our system. In addition, we have helped reduce neighborhood noise by stepping up our locomotive idle-reduction effort, which is geared primarily toward saving fuel and reducing emissions but has the secondary benefit of reducing noise.

#### Excellent report card on environmental audits

Norfolk Southern works diligently to ensure that our facilities and operations comply with applicable environmental laws and regulations. We routinely audit our own operations to ensure compliance and to prevent the potential for compliance issues to arise.

Also, we are inspected on an ongoing basis by regulatory agencies and, on occasion, exceptions are taken which can potentially result in fines. In 2010, 23 inspections were conducted at NS facilities by environmental regulatory agencies and none of those inspections resulted in the issuance of any fines or penalties.

#### Managing hazardous wastes

In 2010, we had two facilities that were considered large-quantity generators of hazardous waste (1,000 kilograms or more in any given month), and there were seven facilities that were considered small-quantity generators of hazardous waste (more than 100 kilograms but less than 1,000 kilograms in any given month). Wastes generated by our facilities are managed and disposed in compliance with all applicable laws and regulations.

#### Investing in environmental performance

Norfolk Southern has an environmental management program that guides employee behaviors. The program's policies and procedures are available to employees on the company's intranet. As part of the program, we make significant investments every year on environmental capital, remediation projects, and compliance initiatives. In 2010, the company invested \$7 million on environmental capital projects such as wastewater treatment plant upgrades, above-ground storage tank dike liners, tank car spill pans, and other capital improvements to enhance our environmental performance. In addition, more than \$25 million was spent in 2010 to support environmental compliance initiatives and remediation activities across our 22-state network.





#### **Protecting our waterways**

Our rail network runs through the eastern United States, including along large and small waterways. Several rail facilities are located on the shores of major waterways, including the Ohio River, Lake Erie, and the Elizabeth River. Many of our rail lines parallel smaller waterways as they provide natural courses through hilly and mountainous terrain.

Systemwide, we have 153 water discharge permits in place that govern the quality of water discharges from our facilities and protect the environment. Typical water discharges include treated wash water, water from repair and maintenance operations, sanitary water, and storm water. We continue to upgrade and install state-of-the art wastewater treatment systems to ensure that we meet or exceed wastewater discharge standards applicable to our operations.

From time to time, however, a train accident occurs that results in the discharge of diesel fuel or a commodity being transported into a waterway. In such cases, we respond immediately to minimize and remediate any releases, working closely with government agencies to restore the affected environment in accordance with applicable regulatory requirements.

Our policy is to report all spills on our property, no matter how small and no matter the source. The number of reported incidents applicable to Norfolk Southern does not distinguish between those that may have an impact on the environment and those that do not. All releases are remediated promptly, and we work closely with regulators to ensure that the environment is restored in accordance with applicable regulatory requirements where damage has occurred.

# **OUR ECONOMIC** PERFORMANCE

Business connections: Norfolk Southern is committed to the delivery of goods in the safest, most cost efficient, and environmentally friendly way possible. We are investing in our rail infrastructure to help the nation remain competitive in a global economy.

# THE BUSINESS OF CONSERVATION

In our 2009 Sustainability Report, we discussed our donation of a conservation easement to permanently protect from development 12,488 acres of our Brosnan Forest. The easement to the Lowcountry Open Land Trust was the largest by a corporation in South Carolina and one of the largest in the Southeast.

Since then, we have further developed a strategic approach toward conservation. It reflects our view that, over the long-term, we can minimize or mitigate effects on the environment consistent with our business objectives and growth.

To that end, we are supporting conservation projects to help reduce the impact of our business operations on the environment.

We call it our carbon mitigation strategy.

It includes our initiative with GreenTrees to reforest the Mississippi Alluvial Valley with native hardwoods. It also includes our collaboration with America's Longleaf Restoration Initiative to maintain and expand longleaf pine habitat in the Southeast. We're also supporting the efforts of the American Chestnut Foundation to restore those trees to their historic range.

Our aim in every case is to balance our business imperatives as a publicly traded FORTUNE 500 corporation with the need to conserve our environment.

"It truly is good business to take care of the environment. **Everything we do—the service** we provide and the products we ship—depends on natural resources. The people who rely on us every day to move their goods want to know that we are doing our part to be good stewards."

JOSH RAGLIN, **GENERAL MANAGER FACILITIES** 

#### CASE STUDY:

#### Good for the environment, good for business

Josh Raglin, general manager facilities, knows first-hand that preserving the environment can be good for the bottom line.

Among his duties, Raglin oversees our Brosnan Forest conference facility, a 16,000-acre preserve located near coastal South Carolina. Originally, the Forest was part of a larger tract of land purchased by a 19th-century predecessor railroad for timber to build track cross ties and to fuel steam locomotives.

Now used for management retreats and business meetings, the Forest is an environmental treasure: It houses the largest U.S. population of endangered red-cockaded woodpeckers on private lands and 6,000 acres of longleaf pine, one of North America's most threatened forest ecosystems.

As part of our conservation strategy, Raglin is leading efforts to leverage preservation of the Forest to mitigate the railroad's environmental footprint and to generate economic returns.

#### Here's how:

- · In the late 1990s, we entered into a cooperative agreement with state and federal wildlife and natural resource officials to protect nesting areas of the red-cockaded woodpeckers. Since then, the number of family groups has grown to 88 from 67, creating 21 mitigation credits we can sell to developers wishing to develop property that has an isolated pair of the birds living on it.
- · We plan to register the Forest as a carbon-offset bank, generating an estimated 500,000 carbon credits that could be sold to individuals or companies wishing to offset their carbon footprint.
- · We have earned certification from the Sustainable Forestry Initiative for our forestry practices at Brosnan Forest. The SFI is a charitable organization that promotes environmentally responsible forestry in North America, including procedures for selective timber harvesting. SFI certification is expected to boost the price we receive for any timber harvested from the Forest because of the sustainable forestry practices employed in growing and harvesting it.
- · We will participate in America's Longleaf Restoration Initiative by maintaining existing longleaf ecosystems at the Forest and restoring stands of longleaf in areas with suitable soils. We also are supporting research of longleaf ecosystems to better understand forest growth, mortality, structure, and product yields.
- We plan to restore 300 acres to wetlands and create a "bank" from which developers can purchase credits to develop in other areas that might require filling wetlands.

"I've always had an affinity for conservation," Raglin says, "but I've been energized by Norfolk Southern's commitment to sustainability. We're doing things that are good environmentally and that are going to be good sources of revenue."

#### Telepresence: greener meetings

Norfolk Southern is tapping innovative technology for efficiency gains in all areas of our operations. With the introduction of telepresence video conferencing, meetings have taken on a new look and feel while saving us time and costs on management travel.

Cost savings are from airline flights and car trips that are not taken, hotel rooms that aren't booked, and fewer hours spent traveling. An added benefit is that the system permits meetings that would not have been held in the past because of expense or logistical issues.

In addition to dollar savings, there's also a reduction in our carbon footprint, based on avoiding air or car travel.

Telepresence was part of a capital project launched in 2009 and put into operation in 2010. We installed the system in conference rooms at our three major office buildings in Atlanta, Roanoke, and our Norfolk headquarters. It features 50-inch widescreen, high-definition monitors, and real-time digital audio and is a vast improvement over conventional video conferencing. Participants appear to be seated around a table instead of at locations hundreds of miles apart.

In the first six months of 2011, we held 675 telepresence meetings. Of those, 174 were called to address immediate issues. Our information technology and operations departments worked jointly to successfully implement telepresence.



# PUBLIC-PRIVATE CONNECTIONS CARRY WIDESPREAD BENEFITS

Norfolk Southern has led the industry in developing ground-breaking public-private partnerships to improve the nation's freight rail transportation network. The aim is to create more rail capacity to shift freight from increasingly congested interstate highways to safer, more efficient, and more environmentally friendly rail.

Through these partnerships, federal and state governments contribute a share of the costs of rail corridor projects based on public benefits generated, including job creation, reduced highway traffic congestion, increased capacity for passenger trains, improved potential for economic development, reduced stress on roads and bridges, and an overall decline in fuel use and greenhouse gas emissions.

Improvement of Norfolk Southern's primary rail corridors is part of our overall strategy to help us and the country conserve fuel and reduce greenhouse gas emissions. Our key public-private partnerships include:

**Heartland Corridor.** In an unprecedented feat of railway engineering, we opened the Heartland Corridor to double-stack container trains in fall 2010 after three years of construction to raise the vertical clearance of 28 tunnels and remove 24 overhead obstructions through the Appalachian Mountains. The corridor improvements shaved approximately 250 miles and more than a day of transit time off of double-stack intermodal freight moving between Virginia's port and the Midwest.

With the Heartland Corridor open, we now have double-stack capacity at every major port on the East Coast to link international shippers to major U.S. consumer markets.



"Projects like the Heartland and Crescent corridors showcase what can be achieved when industry and government partner on projects that carry substantial benefits for the public and the private sectors. With public participation, we can get them done sooner, and the jobs and economic and environmental benefits accrue that much earlier."

ROB MARTÍNEZ, VICE PRESIDENT BUSINESS DEVELOPMENT

The corridor will produce benefits for our customers, the public, and us for years to come. As economic conditions improve, we expect freight volumes on the route to grow, particularly after completion of the Panama Canal expansion in 2014 enables bigger ships to call on East Coast ports.

The Heartland Corridor supports the nation's desire to grow export volumes. In particular, we have seen a strong growth in export grain shipments moving in containers from the Central Ohio region through the port of Norfolk, Va.

Crescent Corridor, Our 2.500-mile Crescent Corridor program carries even greater benefits. This corridor will significantly increase capacity for domestic intermodal freight over a national rail network that spans 13 states from Louisiana and Tennessee to New Jersey.

The \$2.5 billion project includes upgrades to rail and track infrastructure as well as the construction or expansion of five intermodal terminals. In 2010, the federal government, through a Transportation Investment Generating Economic Recovery grant, awarded the corridor project \$105 million to help construct two new terminals, near Birmingham, Ala., and Memphis, Tenn. Since then, we have begun construction of those terminals and a third in Greencastle, Pa., with openings set for 2012.



Both business and environmental communities have endorsed the corridor project, including the leading business associations in Alabama, Maryland, North Carolina, Pennsylvania, Tennessee, and Virginia and 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.

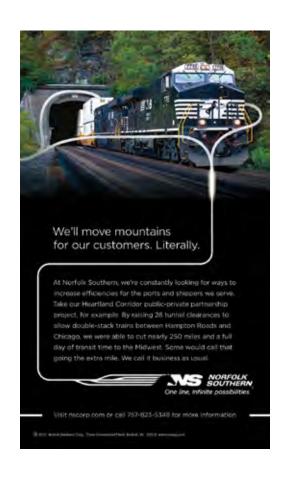
We estimate that the corridor has the potential to remove 1 million tractor-trailer trucks from interstate highways along the route. Independent studies conducted for the railroad estimate that the corridor will result in 169 million gallons of fuel savings annually, an annual reduction of greenhouse gas emissions of more than 1.8 million tons, and the creation or preservation of 73,000 jobs by 2030.

CREATE. Known by its acronym, the 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. This partnership involves Chicago, Illinois, and industry members of the Association of American Railroads, including Norfolk Southern. This \$3.2 billion project will reduce fuel consumption, reduce emissions, and create jobs. Our railroad contributed an estimated \$11 million to the project in 2010, and has budgeted around \$10 million for 2011.

To read more about these public-private partnerships, visit www.thefutureneedsus.com

"Because of the efficiencies we've created on the Heartland Corridor, we can offer customers a higher level of service. Our communities get the benefit of more jobs and economic development opportunities and less congestion on interstate highways. We're burning less fuel, carrying twice the freight, and turning our equipment faster. It's a win for everyone."

JEFF HELLER, GROUP VICE PRESIDENT INTERNATIONAL INTERMODAL





#### WHAT OTHERS SAY:

"Projects like the Heartland Corridor are models for the future. They reflect the public-private cooperation needed to enhance access to global markets and stimulate economic growth across the country."

SCOTT HERCIK, TRANSPORTATION AND TRADE ADVISOR FOR THE APPALACHIAN REGIONAL COMMISSION, which fosters economic development in a 13-state region across the U.S. Southeast and mid-Atlantic

"I believe the Crescent Corridor project is an effective and efficient use of public and private funds. It is a bold example of our nation's potential that exists if we set our sights on a more balanced approach to funding our nation's transportation needs."

KATHERINE LUGAR, EXECUTIVE VICE PRESIDENT PUBLIC AFFAIRS, **RETAIL INDUSTRY LEADERS ASSOCIATION** 

# PROMOTING ECONOMIC DEVELOPMENT

Cultivating economic development in the communities we serve goes hand-in-hand with being a good corporate citizen. Norfolk Southern readily embraces this role by working with state and local economic development authorities to help customers identify the best locations to build and expand facilities to connect to our rail system.

In 2010, our assistance contributed to the location of 67 new industries and the expansion of 25 existing industries along our rail lines in 16 states. Those new and expanded businesses represented a \$2.5 billion investment by our customers. We expect that investment to create 2,000 jobs in Norfolk Southern's territory and eventually generate more than 132,000 carloads of new rail traffic annually.

Development within the energy sector led the way, with the location or expansion of 32 energy-related facilities such as biofuels production and distribution and gas exploration in 12 states on our rail network.

During the past 10 years, our Industrial Development Department has participated in the location or expansion of 1,062 plants, representing an industry investment of \$24 billion and leading to the creation of more than 45,000 jobs. The railroad provides free and confidential plant location services, including industrial park planning, site layout, track design, and logistics assistance.

ECONOMIC PERFORMANCE MEASURES					
	2008	2009	2010		
RAILWAY OPERATING REVENUES	\$10.7 B	\$8.0 B	\$9.5 Billion		
RAILWAY OPERATING EXPENSES	\$7.6 B	\$6.0 B	\$6.8 Billion		
INCOME FROM RAILWAY OPERATIONS	\$3.1 B	\$2.0 B	\$2.7 Billion		
RAILWAY OPERATING RATIO	71.1%	75.4%	71.9%		
NET INCOME	\$1.7 B	\$1.0 B	\$1.5 Billion		
EARNINGS PER SHARE—DILUTED	\$4.52	\$2.76	\$4.00		
TOTAL COMPENSATION AND BENEFITS	\$2.7 B	\$2.4 B	\$2.7 Billion		
YEAR-END STOCK PRICE	\$47.05	\$52.42	\$62.82		
DIVIDENDS PER SHARE	\$1.22	\$1.36	\$1.40		
PRICE/EARNINGS RATIO AT YEAR END	10.41	18.99	15.71		
NUMBER OF STOCKHOLDERS AT YEAR END	35,466	37,486	35,416		
SHARES OUTSTANDING AT YEAR END	366.2 M	369.0 M	357.4 Million		

# A LOT OF CROSSTIES, RAIL, AND STONE

Norfolk Southern operates approximately 20,000 route miles of track. In 2010, we spent approximately \$706 million on roadway projects to maintain the infrastructure, including the replacement of rail, crossties, and ballast.

MATERIAL PURCHASES				
	2008	2009	2010	
CROSSTIES REPLACED	3 M	3.1 M	2.9 Million	
SWITCH TIES AND BRIDGE TIES REPLACED	109,767	112,411	109,530	
RAIL REPLACED	459 miles	455 miles	401 miles	
TONS OF BALLAST REPLACED	2.7 M	3.1 M	2.3 Million	



# PUBLIC SAFETY AND SECURITY ARE KEY **BUSINESS CONCERNS**

Norfolk Southern has taken significant steps to provide enhanced security for our rail system. We have in place a comprehensive security plan modeled on and developed in conjunction with a plan prepared by the Association of American Railroads after the Sept. 11. 2001, terrorist attacks.

In the event of a terrorist threat, our plan includes a range of countermeasures that involve our operations divisions, our information technology and communications, and our railroad police force.

# Chemical transport a key focus

A primary focus of our security efforts is to ensure the safe transport of hazardous materials across our 22-state rail network. Many industrial chemicals and petroleum products used to produce goods essential to consumers and the U.S. economy are regulated as hazardous materials and can be dangerous if mishandled.

Federal law mandates that our railroad, as a common carrier, transport hazardous materials, including commodities described as toxic inhalation hazards (TIH), such as chlorine gas. In 2010, we transported 15,743 shipments of TIH materials, compared to 14,669 in 2009.

Rail is the safest way to transport these materials with 99.97 percent of 1.7 million carloads reaching their destination without incident, according to the AAR. Norfolk Southern works tirelessly to ensure that 100 percent of shipments moving across our system arrive safely.





Our company takes a multi-prong approach that involves extensive employee training, working closely with officials at all levels of government, helping to prepare emergency responders in communities we serve, and carefully coordinating the shipment of these materials with our customers.

# Rigorous employee training

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

All employees who directly affect hazardous material transportation safety 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 pertaining to general awareness, safety, function-specific, and security awareness. We conduct training annually for our train and engine crews, going beyond federal regulations that require such training every three years.

#### Work with emergency responders

Through participation in the TRANSCAER (Transportation Community Awareness and Emergency Response) Program, Norfolk Southern helps local communities prepare for potential incidents involving hazardous materials.

In 2010, we held rail accident response training events in 92 cities and counties across 15 states. Approximately 4,890 emergency responders, including local fire and police, participated in classroom and hands-on training sessions, table-top simulations, and field drills.

The training, representing 19,400 man-hours of emergency response training, provided a unique opportunity to learn about railroad equipment, the transport of chemicals by rail, and the importance of planning for potential incidents.

For the seventh consecutive year, we sponsored a TRANSCAER Whistle Stop Tour on our system that trained approximately 472 emergency responders during a weeklong, five-city tour in Alabama.

These events require a major time commitment by our staff, including employees in our safety and environmental, government relations, corporate communications, transportation, mechanical, and police departments. A total of 2,400 employee-hours is a conservative estimate of time spent on the Whistle Stop project alone.



For our commitment, the railroad received a TRANSCAER National Achievement Award in 2010, marking the ninth consecutive year and the eleventh time overall we've received the honor. TRANSCAER sponsors include the Association of American Railroads, American Chemistry Council, The Chlorine Institute, Chemical Educational Foundation, and National Tank Truck Carriers Inc. For more information on TRANSCAER, visit <a href="https://www.transcaer.com">www.transcaer.com</a>.

#### An assist to communities

The Norfolk Southern Foundation, our charitable giving arm, in 2010 contributed more than \$42,700 to 37 local communities and emergency response organizations. The railroad also provided 26 scholarships, valued at \$43,004, to emergency responders across our system to attend the AAR's Transportation Technology Center Inc. Security and Emergency Response Training Center in Pueblo, Colo.

In 2010, we updated and revised our NS Railroad Emergency Response Planning Guide. Its purpose is to prepare emergency personnel to respond to railway related incidents or emergencies and as a reference source to supplement training programs presented by Norfolk Southern.

#### Tapping technology

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

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

#### Partners with government

Norfolk Southern engages in close and regular coordination with numerous federal and state agencies. 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.

In one notable example, a Norfolk Southern police special agent, under the auspices of the Association of American Railroads, has been assigned to the National Joint Terrorism Task Force. The agent works out of FBI headquarters in Washington, serving as a liaison for the rail industry. The arrangement improves the logistical flow of vital security and law enforcement information with respect to the industry, and it has fostered a strong working relationship between our railroad and the FBI.

Our railroad has worked with officials in certain metropolitan areas and the six East Coast port facilities we serve to develop location-specific security plans.

We also have become a member of the Customs-Trade Partnership Against Terrorism program sponsored by U.S. Customs. As part of the program, we work with customs officials to develop measures that will help ensure the integrity of freight shipments moving on our system, especially those from foreign countries. Our plans meet all current applicable security recommendations issued by U.S. Customs.

# **Recognition of our customers**

Our customers help demonstrate on a daily basis that rail is the safest, most reliable, and environmentally friendly way to transport hazardous chemical products. For the past 15 years, to recognize their safety practices, we have awarded the Thoroughbred Chemical Safety Award to customers that ship more than 1,000 carloads over our network each year without incident.

In 2010, we issued the award to 49 corporations and plant facilities that safely shipped more than 145,900 carloads of chemical products and goods, including industrial chemicals, petroleum, biofuels, and sulfur.

We also partner with customers as part of our TRANSCAER efforts. For example, we regularly move training rail cars for DuPont, PCS, BP, GATX and others free of charge so the cars can be used for drills and training of emergency responders.

#### 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 2010 (pages K13 through K15), as supplemented by the company's subsequent quarterly reports on Form 10-Q. These are available on the company's website at **www.nscorp.com**.

We have practices and policies to manage and mitigate the effects of all these potential risks, including climate change.



# REGULATORY ENVIRONMENT GOVERNS RAIL OPERATIONS

Like all rail freight transportation companies operating in the United States, Norfolk Southern is subject to significant governmental regulation and legislation over commercial, environmental, and operating matters. Railroads are subject to commercial regulation by the Surface Transportation Board, which has jurisdiction over some routes, fuel surcharges, 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, which regulate most aspects of Norfolk Southern's operations.

Norfolk Southern's operations are subject to 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 ensure compliance with these various regulations. We manage in a responsible manner the risks of operating, and we comply with all applicable regulations.

# OUR SOCIAL PERFORMANCE

**Community connections:** Norfolk Southern recognizes that our continued 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.

#### CONNECTING WITH OUR COMMUNITIES

From cleaning waterways to collecting provisions for local food banks, many of our employees get involved in their communities to improve the quality of life and support the railroad's sustainability efforts.

During 2010, the Thoroughbred Volunteers, our formal employee volunteer program, contributed nearly 3,400 hours of service to more than 30 organizations, including the Special Olympics, Atlanta Community Food Bank, the Salvation Army, Habitat for Humanity, the Foodbank of Southeastern Virginia, Grant Park Zoo, MedShare, and Trees Atlanta. This total does not include the untold hours of employee volunteerism outside of our sponsored program.

The Thoroughbred Volunteers collected food and school supplies, tutored elementary school children, read to children in homeless shelters, beautified the Roanoke Valley during Clean the Valley Day, and spruced up homes for seniors and low-income citizens.

In the volunteer group's largest project to date, employees in three states—Georgia, Virginia, and Pennsylvania—combined efforts with the Appalachian Trail Conservancy for a 2010 Spruce-It-Up campaign on the Appalachian Trail. Employees spent a Saturday in July clearing brush, cleaning culverts, fixing shelters, and cutting back overgrowth along the country's longest scenic trail.

The 2,175-mile trail runs roughly parallel to our 2,500-mile Crescent Corridor, a multistate, high-capacity, intermodal freight rail route. We are working with federal, state, and local partners to improve the corridor and create green jobs, stimulate local economies, and reduce highway congestion and greenhouse gas emissions.

Formed in Norfolk in 2006, the Thoroughbred Volunteers expanded to Roanoke, Va., in 2008 and to Atlanta in 2009. The volunteer group expanded in 2010 to include employees at our Harrisburg, Pa., operations.

"We get a ton of people out here because we want to make a difference in the community and teach our children that helping people and the environment is an important part of life."

STEVE STASULIS,
MANAGER PERFORMANCEINTERNATIONAL INTERMODAL

#### Trying to make a difference

Along a half-mile stretch of Elizabeth River shoreline, 50 Norfolk Southern employees, family members, and friends proved that all of us working together can help preserve the environment.

On a Saturday morning in June, our volunteers cleared nearly 8,000 pounds of debris as part of the 2011 Clean the Bay Day. Sponsored by the Chesapeake Bay Foundation, the annual event promotes awareness of pollution in waterways and is one of Virginia's largest volunteer events.

In addition to pulling heavy lumber from the water's edge, the group collected an assortment of items, including a violin, a no-parking sign, a fire hose, and a hotel room key.

"There's nothing good that people produce that goes into the water that's going to help the environment," said Steve Stasulis, manager performance-international intermodal, and a member of Norfolk Southern's Thoroughbred Volunteer Council. Stasulis coordinated the company's involvement and served as zone captain.

"When we get our employees directly involved," he said, "people see us doing things not because it's our job but because we care."





# THOROUGHBRED VOLUNTEERS IN THE COMMUNITY



#### 2010 HIGHLIGHTS

#### **ATLANTA**

- 1,383 HOURS
- Hands On Atlanta Discovery Tutoring Program
- · Home Repair/Painting Day with Senior Citizens Services
- Atlanta Community Food Bank
- · Lunchtime Reading Program with **Everybody Wins!**

#### **NORFOLK**

- **1,095 HOURS**
- · Collected 805 pounds of food for Foodbank of Southeastern Virginia
- Picked up 2,580 pounds of trash during the Chesapeake Bay Foundation's Clean the Bay Day
- Collected 7,281 items for Norfolk Public Schools

#### **ROANOKE**

470 HOURS

- Mill Mountain Zoo Build Project
- Clean Valley Day
- · Back to School Blast
- · Appalachian Trail Event

#### **HARRISBURG\***

**390 HOURS** 

• 320 hours placing stone grading on trails during Spruce-It-Up Campaign for the Appalachian Trail

<sup>\*</sup>Organized Thoroughbred Volunteers during 2010

Since its founding in 1983, the Norfolk Southern Foundation has contributed nearly \$117 million to thousands of charitable organizations in communities we serve.

#### Helping to build community

Nearly 30,000 Norfolk Southern employees live and work in the railroad's 22-state territory. As a responsible corporate citizen, the railroad contributes to the economic vitality and well-being of those communities.

In 2010, the Norfolk Southern Foundation, our charitable giving affiliate, donated more than \$5.6 million to organizations supporting the foundation's four priorities: providing shelter to those in need; expanding educational opportunities for children; helping conserve the environment; and promoting the arts and culture.

In a tough economy, the foundation awarded more than \$2 million to United Way and other health and human services groups, a 19 percent increase over 2009. More than \$750,000 went to groups such as The Foodbank of Southeastern Virginia, ForKids Inc., which provides services for homeless families with children, and Hands On Atlanta, which builds community and meets critical needs through volunteer service and civic engagement.

To support work force diversity, the foundation in 2010 provided \$313,870 to organizations that support higher education for women and minorities, more productive community relations, and services to underserved populations.

Benefitting from a 23 percent funding increase were performing arts groups, public TV and radio, museums and zoos, and cultural centers.

In coming years, the foundation aims to increase funding for environmental conservation. In 2010, the foundation provided first-time funding to the American Chestnut Foundation to support a project that will reforest abandoned coal mines in West Virginia, Pennsylvania, and Kentucky.

"All of us in some way have an impact on the environment." said Katie Fletcher. foundation director. "We have a footprint across 22 states, and it makes sense for us to invest in efforts to preserve the environment in the areas where we operate."

# **NS FOUNDATION AND CORPORATE 2010 GRANTS GRANTS COMMUNITY RELATIONS** \$2,089,768 UNITED WAY 77 organizations \$1,332,000 OTHER HEALTH AND HUMAN SERVICES \$757.768 83 organizations **CULTURE AND THE ARTS** \$1,833,730 65 organizations **EDUCATION** (including matching gifts): \$1,013,245 79 organizations CIVIC AND COMMUNITY \$491,545 (including environmental): 79 organizations **MATCHING GIFTS** \$1,403,154 **EDUCATION** 664 gifts to 280 institutions \$866.870 ARTS/CULTURE 697 gifts to 206 institutions \$515.749 **ENVIRONMENTAL** 56 gifts to 24 organizations \$20,535

# **EMPLOYEES MAKING A DIFFERENCE:**

'No one should have to go hungry'

**Richard Kiley,** group vice president automotive, is a long-time community volunteer. For the past two years, he's served on the board of directors of the Foodbank of Southeastern Virginia, a nonprofit that works with agencies to distribute food and clothing. The organization serves nearly 110,000 people, and about 30 percent of household members reached are children under 18.

Kiley and other employees from our Thoroughbred Volunteers group help with an annual canned food drive and also spend time at the food bank's warehouse sorting food for delivery.

In 2010, the volunteers joined the "BackPack" program, a new effort to ensure that school children have meals over the weekend. Food is delivered to schools, placed in backpacks, and sent home with the kids. Nearly 80,000 children in the Foodbank's coverage area qualify for free or reduced-priced school meals, an indicator of the need, Kiley said. "When you think about a 6-year-old or a 9-year-old going without food for the weekend, that's pretty sobering," he said.

Kiley is proud to represent our railroad on the food bank's board. "I consider Norfolk Southern to be a leader in the community," Kiley said. "Having representation on the board sends a message to others in the community that Norfolk Southern is involved and that we are concerned about the places where we live."



"There still are many people without jobs, health care, or homes. By providing a grant to food banks and homeless shelters, the foundation is able to touch a lot of people that we individually or as a company could not touch."

KATIE FLETCHER, FOUNDATION DIRECTOR

"There are a lot of people, especially right now, who are not food secure meaning they don't know if they're going to have full access to meals this week. We can talk about a lot of areas that Norfolk Southern should spend its time on and contribute to, but ensuring that people have food is just a very basic need."



RICHARD KILEY, GROUP VICE PRESIDENT AUTOMOTIVE

#### **Expanding recreation for communities**

As a large private landowner, Norfolk Southern strives to engage in sustainable real estate practices in the communities we serve. One way we do that is by partnering with states or localities to turn former railroad rights of way into hiking, biking, and walking trails.

In 2010, Norfolk Southern donated:

- 1.2 acres of land and a bridge appraised at \$1.08 million to support Pulaski, Va., and its Iron Bridge Trail Project.
- more than 31 acres of land appraised at \$100,000, to the Stark County, Ohio, Parks District.
- 3.5 acres to assist with a flood control project in Sharonville, Ohio

By supporting projects that improve the livability of communities, we strengthen existing connections with those we serve and forge new ones as well.

#### Promoting rail safety

Norfolk Southern is committed to public safety. To help educate the public about highway-rail grade crossing safety and to discourage trespassing on railroad property, we have been a strong supporter of Operation Lifesaver, the national safety program, since its inception in the early 1970s.

In 2010, we sponsored Operation Lifesaver's "Common Sense" safety campaign targeting younger audiences with the goal of reducing car-train collisions and trespasser incidents. Our employees have served Operation Lifesaver in leadership roles at the state and national levels and have volunteered their time as certified presenters for the program in communities throughout our network.

Norfolk Southern's novel "Train Your Brain" safety campaign features a giant pink ambulating public safety ambassador, "Brainy," that makes appearances at community festivals. The campaign targeted Indiana audiences in 2010 and in 2011 is running in Ohio markets, attracting attention with warnings about the consequences of racing trains at crossings. The campaign uses unconventional marketing strategies to reach college audiences at campuses such as Ohio State, Notre Dame, North Carolina State, and the University of Memphis.

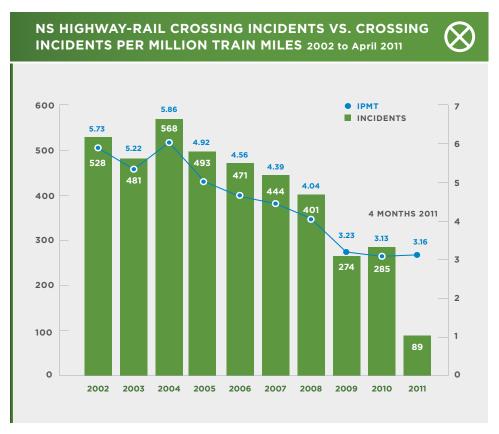
"Train Your Brain" was launched in Memphis, Tenn., in 2007. Brainy returned to Memphis in 2011 and was chased by zombies during the city's annual zombie walk. To view photos and video of how Brainy fared with the zombies, and to get more information about Train Your Brain, visit www.brainysworld.com. The campaign is administered by archer>malmo, a Memphis marketing communications agency.











Source of data for crossing incidents: Federal Railroad Administration Safety Data

Through education, enforcement, and engineering, Norfolk Southern strives to continually improve public safety at highway-rail grade crossings. Incidents involving trains and motor vehicles or pedestrians on our network have been on a declining trend over the past decade. In 2010, there were 285 incidents overall, or 3.13 incidents per million train miles.

#### New social tools help us connect

Chances are many of our customers and employees have seen our Facebook page, watched our videos on YouTube, or followed us on Twitter. Norfolk Southern has embraced these new methods of communication for staying connected to the communities we serve.

In 2010, Stacey Parker became our manager of community outreach, a new position created to expand and enhance our outreach programs.

"We're actually engaging with our communities," Parker said. "With social media, it's a dialogue and no longer a monologue."

Social media has given us a visible presence in the communities we serve. Our Facebook page has more than 15,000 fans, while our Twitter account has about 1,700 followers. Our Facebook posts include industry news, vintage railroad ads, trivia contests, and birthday greetings to fans. We respond to many comments. "It's showing our humanity," Parker said. "Because we're talking to them, they're there wanting to stick up for us."

Tweets range from news releases to greetings from Parker's visits to rail yards. "We're giving them something they don't get, which is an inside look, and they love that."

Rail enthusiasts and other Norfolk Southern communities frequently click on our YouTube videos, which include everything from company initiatives to archival footage showing how we repaired railroad tracks 60 years ago.

Social media also helps us connect citizens to their congressional representatives. We are updating our legislative action website with information about issues coming before Congress that could affect Norfolk Southern.

"It's great when railroad employees write to their representatives in Congress," Parker said, "but it's even better when constituents who don't work in the industry write and ask members of Congress to support or oppose a piece of legislation because it's important for their communities."

Norfolk Southern also uses more conventional methods to interact with communities. For example, over the past 40 years more than 1.5 million people in several hundred cities have climbed aboard our exhibit car, a rolling museum that features interactive displays highlighting our transportation system.

"Through social media, **Norfolk Southern connects** with a community of followers and supporters fascinated by a 180-year-old company that helped build America and continues to drive local economies across our service territory. We're a corporate neighbor, and our virtual community is like an open door that invites people to drop by for a chat."

RICK HARRIS, **DIRECTOR CORPORATE** COMMUNICATIONS









Years ago, railroads had station agents in nearly every town who served as a point of contact with the community.

Norfolk Southern has revived that connection through its Thoroughbred Speakers Network. Employees share our story with community, school, and business groups in areas served by the railroad. Our 65 speakers have given 127 presentations on a variety of issues emphasizing the importance of rail transportation.

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 solving the nation's transportation crisis.

One of our speakers, Kimberly Thompson, manager strategic market analysis, connected with students during a presentation to a technology class at Old Dominion University. Kim Baskette, a PhD graduate assistant who teaches the class, said Thompson opened students' eyes to potential railroad careers.

"Students generally think of cars and airplanes when discussing transportation technologies, and don't give much thought to the railroads," Baskette said. "I think many of them view trains to be antiquated. Kimberly's presentation was very insightful and gave the students a great overview of Norfolk Southern and the role it plays in transportation."

#### Spreading the word on sustainability

During the past year, Megan Garry, manager corporate sustainability, took Norfolk Southern's sustainability message to a community college in Tennessee and a middle school in New York—without ever leaving our Norfolk headquarters.

Using video conferencing programs WebEx and Skype, Garry helped her audiences better understand the railroad industry's role in a green economy while saving on travel costs and the resulting environmental impacts.

"Railroads are a fuel- and carbon-efficient freight transportation option," she said. "Skype and WebEx make it feasible for me to share this message with the communities in which we operate and provide an accurate picture of modern freight rail."

Blair Wimbush, vice president real estate and corporate sustainability officer, also has been spreading our sustainability message. He gave presentations at four major events in 2010, including a speech to the Environment Virginia Symposium at Virginia Military Institute, a keynote address to supply chain doctoral candidates at the University of Tennessee School of Business, and a panel discussion at the Georgia Foreign Trade Conference.

Richard Russell, system director environmental protection, spoke about our sustainability efforts in 2010 at the Railroad Environmental Conference at the University of Illinois at Urbana-Champaign.

#### Partnering on passenger rail

Norfolk Southern recognizes the public interest in promoting passenger rail services and has business agreements with several passenger operators, including Amtrak.

In late 2010, the railroad reached a landmark agreement with Virginia on a multi-year effort to develop the startup of daily Amtrak passenger service between Norfolk and Washington, D.C. We also reached significant agreements with North Carolina transportation officials to permit the construction of infrastructure improvements to enable additional passenger rail service between Charlotte and Raleigh.

In addition, we reached a significant agreement with Amtrak and Illinois officials, paving the way for construction of the so-called "Englewood Flyover"—an important infrastructure project that is part of the Chicago Region Environmental and Transportation Efficiency, or CREATE, program. This project will improve the efficiency of intercity and commuter passenger rail service through the busy Chicago hub.

While we support passenger rail programs, we want to ensure that these initiatives are accomplished without impeding current or future freight traffic. We follow four guiding principles in considering proposals to operate passenger service on our freight lines. Passenger train operations must:

- Be transparent to our freight operations, meaning sufficient infrastructure must be available for both passenger and freight trains to operate without delay and to have opportunities to grow.
- Provide fair value for the use of our assets.
- Offer full liability protection.
- Operate without subsidy from Norfolk Southern.





# CONNECTING WITH GOVERNMENT TO SUPPORT SUSTAINABILITY GOALS

We expect to update this portion of the 2011 Sustainability Report in February 2012 to reflect monetary contributions made during 2011.

The political process significantly impacts Norfolk Southern through government policies, legislation, and regulatory decisions. As a result, our board of directors believes that it is in the best interests of Norfolk Southern and our stockholders for the company 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, Norfolk Southern furthers public policy goals that are consistent with the sustainability of our business and values.

# Company Contributions to Candidates, Committees, and Political Organizations

Although federal law prohibits companies from contributing to candidates for federal office, many states allow corporate contributions to state and local candidates, committees, and political organizations. Our board of directors has authorized the company to contribute to state and local candidates for public office, political committees and political parties, and for other political purposes, subject to any legal limitations and applicable reporting requirements, up to \$500,000 per calendar year. We make political contributions when we determine them to be in the best interests of the company. These contributions are made according to the following procedures:

- at least two authorized individuals initiate a contribution recommendation:
- the recommendation is reviewed and approved by an attorney in the law department;
- the recommendation is reviewed and approved by the vice president law; and,
- a check is drawn against a separate account maintained and funded solely for the purpose of making such contributions and signed by two authorized individuals.

For a list of the company contributions made to state and local candidates and political committees in 2010, click **here**. For a list of company contributions made during 2010 to tax-exempt political organizations maintained under Section 527 of the Internal Revenue Code, click **here**.

#### **Good Government Fund**

Norfolk Southern also has established a separate segregated fund under federal law, the Norfolk Southern Corporation Good Government Fund. The GGF is a nonpartisan political fund that provides financial support to candidates and office holders, regardless of party affiliation, whose views match the interests of Norfolk Southern. The GGF is funded entirely through voluntary contributions, primarily from NS employees, and is governed by a steering committee consisting of NS employees. GGF contributions are made according to the following procedures:

- at least two authorized individuals initiate a contribution recommendation;
- the recommendation is reviewed and approved by an attorney in the law department; and,
- · a check is drawn against the GGF's account and signed by two authorized individuals.

For a list of the GGF contributions made to federal, state, and local candidates, and political committees in 2010, click **here**.

# **Participation in Trade Organizations**

Norfolk Southern participates in rail industry trade associations, chambers of commerce and other trade organizations. These organizations promote collaboration among the members and provide a forum to allow the members to focus on issue advocacy and promote best practices in safety, operations and business. Among many other benefits, membership typically provides Norfolk Southern employees with the opportunity to participate in educational and public relations activities, industry conferences, and networking opportunities.



# **CONNECTING WITH EMPLOYEES**

# A culture of safety

As our CEO Wick Moorman tells employees, safety is the foundation of everything we do at Norfolk Southern.

Safety is ingrained in our corporate culture. We nurture an attitude of safety in which we all are our brother's and sister's keeper, watching out for each other to make sure everyone goes home safe to family and friends at the end of every work assignment.

We have developed an extensive safety program and process for working safely on the job, ranging from job briefings and safety checklists to regular safety audits to monitor both for unsafe work conditions and unsafe work behavior.

For the 22nd consecutive year in 2010, our employees had the best safety performance among North America's largest railroads, earning the E.H. Harriman Gold Medal Award for industry safety. Employees achieved a safety ratio of 0.89 injuries per 200,000 employee-hours, the lowest ever achieved by our railroad. Our engineering department achieved a 0.50 injury ratio, another best-ever performance. Our system production gangs—the employees who lay rail, install crossties, and surface track—for the first time went the entire year without a reportable injury.

Compared with 2009, 45 fewer employees in 2010 had a reportable injury on the job, a 15 percent decrease. The number of employees requiring medical attention decreased by seven, or nearly 12 percent, while 46 fewer employees lost work time because of an injury, a 19 percent drop.

As much as we have improved, we will not be satisfied until we finish a year with zero injuries or incidents.

EMPLOYEE INJURY DATA				
	2008	2009	2010	
WORK-RELATED FATALITIES	1	0	2	
INJURIES PER 200,000 EMPLOYEE-HOURS	.94	1.08	.89	
PEOPLE INJURED	298	296	251	
PEOPLE WITH RESTRICTED ACTIVITY	1	2	4	
PEOPLE REQUIRING MEDICAL ATTENTION	55	59	52	
PEOPLE WHO LOST TIME BECAUSE OF INJURY	242	241	195	

#### IN THEIR OWN WORDS: OUR EMPLOYEES ON SAFETY

"What it's really all about is everybody going home safely to our families. Doing that every day, and seeing people retire healthy and being able to enjoy retirement—that's No. 1 in safety to me."

EDDIE MARRS, GANG LEADER PIPEFITTER, BLUEFIELD, W.VA.

"With Norfolk Southern, it's work safely—work slowly if you have to, but get it done right and be safe."

GARY LOMBEL, CONDUCTOR, JERSEY CITY, N.J.

"Being No. 1 in safety means business. We've got proof through the dedication of our employees and our safety record that we will get a customer's product where it needs to be on time and safely."

GARY PRICE, MACHINE OPERATOR, MARION, VA.



#### Training is key

Training is essential to Norfolk Southern's operations. For every new hire in our agreement, or union, workforce, training begins at the company's training center near Atlanta. New employees spend between 40 and 320 hours there. Trainees in the company's management and operations supervisor programs also attend classes at the facility. The operations supervisor program provides an opportunity for agreement employees to advance into operations management positions.

Employee training and development does not begin and end with new hires. Thoroughbred School, Norfolk Southern's innovative approach to work-force development, delivers training at its corporate training facility at our Norfolk headquarters. In one of the program offerings, management employees from across the company meet for four-day sessions that help them gain a broader understanding of our railroad-from financials to operations to the global economy's impact on the business. We also support employee education and development through online training, classroom instruction, and a tuition reimbursement program.

# A HEALTHY DOSE OF WellNS Supporting healthy lifestyles

Tony Williams didn't expect to wind up on the Today Show or in USA Today and the Chicago Tribune when he signed up for Norfolk Southern's discounted Weight Watchers at Work program.

However, the Lake Division locomotive engineer became a celebrity after losing more than 100 pounds and nine pants sizes, while encouraging co-workers and others to improve their health.

Williams is one of many Norfolk Southern employees who have been influenced to make healthier lifestyle choices through WellNS, our voluntary employee wellness program. Expanding on its motto of "I've Got the Power," WellNS in 2010 emphasized employees' power to know their health, get active, quit tobacco use, and eat healthier. After all, healthier employees tend to be more productive and safer, with fewer missed days and lower medical expenses related to illness and injury.

This year, approximately 1,800 employees signed up for the new Virgin Health Miles program whereby they can earn up to \$500 during the year for being active. Also new in 2011—the PowerTrain Program in which teams of 10 or more Norfolk Southern employees compete in physical activities for non-profit charities. As an incentive, the company donates \$1,000 to the organization on the team's behalf.

WellNS offers employees discounts to 350 fitness centers nationwide and encourages healthy eating by stocking vending machines throughout the system with wholesome snacks. To make healthier items even more appealing, they are priced at a lower cost than less healthy choices.



#### A CASE STUDY IN WellNS:

#### A menu for our road crews

While on the road hauling freight, our train and engine crews eat many of their meals at Norfolk Southern's Track's End restaurants, which are managed by a contract company and open to the public. To satisfy taste buds and promote wholesome eating, our lodging services group added salads, grilled chicken, fruit, and other low-fat choices to the menu.

"A lot of the guys want to eat healthier and lose weight," said **Billy McConnell** of NS Lodging Services. "Now we're offering more salads and even bunless hamburgers wrapped in lettuce." The new menus went into effect in spring 2011 and are being implemented at all seven Track's End restaurants.

In another WellNS initiative to promote healthy living, Lodging Services is making sure that all hotels used by our T&E crews have fitness centers complete with treadmills, elliptical machines, and other exercise equipment.

"They use the fitness facilities quite often," said **Ralph Ramsey**, our assistant manager lodging. "We'll switch hotels if they don't have a fitness center or won't install one."



# We support employee diversity

Our nearly 30,000 employees represent many backgrounds, cultural experiences, ideologies, and skills, and we support a variety of programs to promote diversity.

We have formed a diversity council that is composed of a cross-section of employees and supports our belief that all employees offer unique perspectives and contributions. The council helps identify ways to fully utilize employee talents and develops and implements initiatives to promote diversity, mutual respect, and professionalism.

In 2004, we formed WiNS, a women's employee network. WiNS is open to all employees and has more than 1,200 members. Its mission is to give Norfolk Southern a competitive advantage by fostering professional development and leadership.

In 2009, we introduced YoungNS, a network for young professional employees, at our Norfolk headquarters. As of mid-2011, the group had 220 members of all ages and years of service. It seeks to strengthen the management workplace and improve retention through mentoring, education, professional development and networking. In early 2011, YoungNS expanded to Atlanta and broadened its membership to include union employees. It had 270 members by mid-year.

DEMOGRAPHICS							<u>.2.e</u>
	TOTAL	MALE	FEMALE	CAUCASIAN	BLACK	HISPANIC	OTHER MINORITIES
ALL EMPLOYEES (AS OF JULY 2011)	29,975	27,903	2,072	25,320	4,013	340	302
SENIOR MANAGEMENT (BOARD-APPOINTED OFFICERS)	30	27	3	25	3	2	0
BOARD OF DIRECTORS	11	10	1	10	1	0	0
GOVERNANCE AND NOMINATING COMMITTEE	5	4	1	4	1	0	0
AUDIT COMMITTEE	5	4	1	4	1	0	0
COMPENSATION COMMITTEE	5	5	0	5	0	0	0
EXECUTIVE COMMITTEE	5	5	0	5	0	0	0
FINANCE COMMITTEE	5	5	0	5	0	0	0

#### Equal treatment and opportunity

Norfolk Southern complies with all applicable laws, regulations, and executive orders concerning equal opportunity and nondiscrimination. 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.

The explicit intention is to assure equal treatment and opportunity for all employees and employment applicants beyond simple compliance with the letter of civil rights legislation, and to make every effort through affirmative action to comply with the spirit of equal employment opportunity.

Consistent with the corporation's commitment to equal treatment and opportunity for all employees and employment applicants, the company's Equal Employment Opportunity staff meets with department supervisors to make certain the corporation's EEO policy is being followed. Company representatives explain the EEO policy in employee orientation and management training programs. The EEO staff also develops training programs and conducts special meetings to explain the content of the policy and individual responsibility for effective implementation, making clear our commitment on EEO matters.

The EEO staff is responsible for auditing implementation of the corporation's affirmative action program. The auditing process includes: (a) monitoring records on applicants, hires, promotions, terminations, and transfers at all levels to ensure nondiscrimination; (b) evaluating each facility periodically concerning the degree to which projected goals have been met; (c) reviewing the results of each evaluation, as necessary, with appropriate levels of management; (d) advising senior management periodically of program effectiveness and appropriate remedial action.

#### Benefits for today, and for the future

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

For our unionized work force, called agreement employees because they are covered by collective bargaining agreements, Norfolk Southern participates in the Railroad Employees National Health and Welfare Plan. It is a collectively bargained welfare benefit plan providing medical, mental health and substance abuse, prescription drug, dental, vision, life, and accidental death and dismemberment benefits for virtually all unionized employees of the biggest rail carriers, called Class 1 railroads. More than half of the railroad's unionized employees are covered by one of several short-term disability supplemental sickness benefit plans. Unionized employees also are eligible to participate in a 401(k) savings plan with a company match. Agreement employees make up about 83 percent of Norfolk Southern's work force.

For management employees who are not represented by a union, called nonagreement employees, Norfolk Southern provides health care (consisting of medical, mental health and substance abuse, and prescription drug coverage), dental, vision, and life insurance benefits. The company provides a range of options that allows employees to choose coverage that is best for each employee's needs.

Nonagreement employees can elect other benefits, such as accidental death and dismemberment insurance, health and dependent care reimbursement accounts, and long-term care insurance, with employees paying the full cost for such benefits.

Nonagreement employees are eligible for salary continuance benefits for one to six months based on length of service. Long-term disability benefits, plus other qualifying benefits, designed to pay a portion of an employee's salary if total disability occurs, add up to 50 percent of basic monthly salary. Nonagreement employees also are eligible to participate in a 401(k) retirement savings plan in which the company matches up to 3.5 percent of employee contributions. The company also provides a defined benefit retirement plan for nonagreement employees. This pension benefit is fully funded by Norfolk Southern, and an employee is vested in the benefits after five years of service with the company.

For all employees, Norfolk Southern offers a matching gifts program designed to encourage employee support of eligible nonprofit educational, cultural, and environmental organizations where employees can receive matching gifts support for eligible contributions of up to \$35,000 per calendar year. The company also offers an education assistance program designed to help further an employee's education that is available to all full-time employees with six months of service and provides a maximum individual benefit of \$5,250 per calendar year. There are 11 paid holidays, and all eligible employees earn vacation ranging from one week to five weeks based on length of service.

In addition to benefits provided by Norfolk Southern, 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 railroad industry pay Railroad Retirement taxes instead of FICA taxes under Social Security. While payroll taxes for Railroad Retirement are slightly higher, it provides benefits at retirement that are significantly greater than Social Security.

# AWARDS AND RECOGNITION

Norfolk Southern's mission is to be the safest, most customer-focused, and successful transportation company in the world. We are honored and gratified when others recognize our efforts to be the best in the business. Here are some of the achievements during the past year that make us proud.

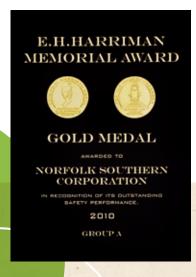
# No. 1 in safety

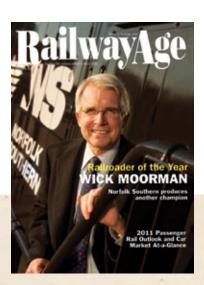
For the 22nd consecutive year, Norfolk Southern won the rail industry's E.H. Harriman Gold Medal Award for having the best employee safety record among North America's largest line-haul railroads. The company had an injury ratio of 0.89, an all-time low, based on the number of injuries per 200,000 employee-hours. Our system production gangs—the employees who maintain and install rail, crossties, and ballast—worked all of 2010 without a single reportable injury.

#### The industry's top railroader

Railroad industry trade magazine *Railway Age* named Wick Moorman, Norfolk Southern's chairman, president, and chief executive officer, the 2011 Railroader of the Year. The award, one of railroading's most prestigious, is presented annually to honor an individual who has made an outstanding contribution to the industry. *Railway Age* Editor William C. Vantuono cited Moorman's strong leadership in areas critical to the future of Norfolk Southern and the rail industry.

Explaining why Moorman was selected, Vantuono wrote: "In addition to performing solidly, controlling costs, improving productivity, and continuing to invest in growth capital in a recessionary economy, Norfolk Southern has excelled in technological innovation and development of public-private partnerships. Among the many examples of these accomplishments are the railroad's building and testing of an all-electric battery-powered yard locomotive, and opening of the Heartland Corridor, a major intermodal artery developed in partnership with several states. Norfolk Southern is strongly positioned for growth and is an example of why railroads are increasingly the mode of choice for the nation's transportation needs."







### Helping communities prepare

For the ninth consecutive year and 11th time overall, Norfolk Southern in 2010 earned the TRANSCAER (Transportation Community Awareness and Emergency Response) National Achievement Award. The award recognized extraordinary achievement for the railroad's support of efforts to prepare communities to respond to possible emergencies involving the transport of hazardous materials.

### A good corporate citizen

For the third time, *Corporate Responsibility Magazine* named Norfolk Southern to its 100 Best Corporate Citizens List. The railroad ranked 79th. The list, selected from among large-cap Russell 1000 companies, is based on 360 public data points relating to the environment, climate change, human rights, philanthropy, employee relations, financial performance, and governance.

### An energy "star"

Norfolk Southern's Arnold B. McKinnon headquarters building earned the 2010 U.S. Environmental Protection Agency's ENERGY STAR® rating, the national symbol for protecting the environment through energy efficiency. Commercial buildings that earn the EPA designation use an average of 35 percent less energy than typical buildings and release 35 percent less carbon dioxide into the atmosphere.

### Green and getting greener

For environmentalism in 2010, *Newsweek* magazine ranked Norfolk Southern higher among the 500 largest publicly traded companies in America than in prior years. The company scored 71.28 of 100 points and ranked 233 in 2010. That's an improvement over its 2009 score of 67.61 points and ranking of 338. Companies evaluated in the report were included by virtue of their revenue, market capitalization, and number of employees. Newsweek said companies were measured based on environmental footprint, green initiatives, and a poll of CEOs, environmental officers, and other green experts.



Norfolk Southern's Heartland Corridor project won the American Railway Engineering and Maintenance-of-Way Association's 2010 William W. Hay Award for Excellence in railway engineering. The \$190 million project included modifying 28 railroad tunnels and seven bridges to allow double-stack intermodal trains to run a more direct route between Virginia's port and Midwest markets. AREMA said the project met the Hay Award criteria for innovation, safety, and service reliability. The award is named after the late William W. Hay, an academic leader in railroad engineering for more than 25 years.

### Excellent service to the auto industry

Based on rigorous, unannounced audits of rail-served automotive facilities in North America, the Association of American Railroads presented Norfolk Southern's Automotive Distribution Group with two Automotive Quality Excellence Awards for outstanding service. The railroad won the Highest Quality Review Score for Destination Facilities by achieving a perfect score of 100 percent at its Titusville, Fla., automotive facility. This was the first perfect score ever given any facility since the AAR began its present audit program in 1997.

Norfolk Southern also won the award for Greatest Overall Quality Review Score Improvement at Chrysler's Jefferson automotive ramp in Detroit. Since Norfolk Southern began operating this facility two years ago, its score improved from 74 percent to 98.57 percent.

### A green supply chain company

Supply & Demand Chain Executive magazine selected Norfolk Southern as a winner of its 2010 Green Supply Chain Award. The firms selected "stood out for their projects to incorporate sustainability objectives into their own supply chains or to enable sustainability in their customers' supply chains," according to Andrew K. Reese, the magazine's editor. Norfolk Southern was the only railroad to win the award.

### A Top 50 green partner

Inbound Logistics magazine named Norfolk Southern to its 50 Green Supply Chain Partners list for 2010, citing those selected as "supply chain visionaries who are leading the green revolution." The magazine cited the railroad's upgrade of its locomotive fleet to reduce emissions and our use of innovative technology to reduce locomotive emissions and fuel consumption.

### A military friendly company

For the sixth year, G.I. Jobs magazine named Norfolk Southern to its America's Top 100 Military Friendly Employers list. The railroad was ranked 19th. The annual list recognizes companies that have made the greatest effort and had the greatest success in hiring military veterans, and that have the best policies for employees serving in the National Guard and Reserve who are called to active duty.

### Good company for diversity

Black Enterprise magazine named Norfolk Southern to its 2010 list of the 40 Best Companies for Diversity. The magazine based its list on overall participation of African Americans and members of other ethnic minority groups in four areas: employee base, senior management, board representation, and supplier diversity. The 40 best companies were selected based on the results of a survey sent to 1,000 major publicly traded corporations and 100 leading global companies with significant U.S. operations.

"We recognize that a diverse workforce and inclusive business practices provide us with a competitive advantage and are keys to our future success," said Cindy Earhart, vice president human resources.

### Analysts rate NS executives among the best

Norfolk Southern and several of our senior managers received recognition in Institutional Investor magazine's second annual All-America Executive Team survey. The magazine asked nearly 1,300 buy- and sell-side analysts and investment professionals at more than 550 firms to identify the best executives among U.S. companies they cover, and to rate the companies on a range of qualities, including access to senior managers and corporate social responsibility.

Jim Squires, executive vice president and chief financial officer, was named among the top three chief financial officers. Sell-side analysts nominated Wick Moorman for best CEO. Sell-side analysts nominated Leanne Marilley, currently director markets planning and analysis, for best investor relations professional. Sell-side analysts nominated Norfolk Southern for overall best investor relations.

# **OUR BUSINESS** PROFILE

A premier rail freight transportation service provider: Norfolk Southern Corporation is one of the nation's premier transportation companies. Its major operating subsidiary, Norfolk Southern Railway, 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. Norfolk Southern operates the most extensive intermodal network in the East and is a major transporter of coal and industrial products.

### ONE LINE, INFINITE POSSIBILITIES

Our railway transports raw materials, intermediate products, and finished goods primarily in the Southeast, East, and Midwest and, via interchange with rail carriers, to and from the rest of the United States. Norfolk Southern also transports overseas freight through ports we serve on the Atlantic and Gulf coasts, and provides 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. Through a limited liability company, Norfolk Southern and CSX Corporation jointly own Conrail Inc., whose primary subsidiary is Consolidated Rail Corporation. Norfolk Southern has a 58 percent economic and a 50 percent voting interest in the jointly owned entity.

Norfolk Southern Railway, together with its railroad subsidiaries, transports freight classified in the following market groups, noting in each case the percentage of total railway operating revenues contributed in 2010: coal (28 percent); intermodal (19 percent); agriculture, consumer products, and government (14 percent); chemicals (14 percent); metals and construction (11 percent); paper, clay, and forest products (7 percent); and automotive (7 percent).



Although most of Norfolk Southern's customers are domestic, ultimate points of origination or destination for some of the products we transport is outside the United States, particularly coal bound for export and some intermodal containers.

Norfolk Southern makes available free of charge through its website at www.nscorp.com its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the 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



### **OUR GOVERNMENT STRUCTURE AND MANAGEMENT SYSTEMS**

### A vision for safety, service, success

Norfolk Southern's corporate policies and procedures connect our economic, environmental, and social performance to a 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 180 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. Not intended to be limiting, the SPIRIT values-Safety, Performance, Integrity, Respect, Innovation, and Teamwork-provide a framework for Norfolk Southern's 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 co-workers.

**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 we are expected to conduct ourselves. Our directors, officers, and employees are expected to conduct themselves in accordance with the SPIRIT values and the code of ethics. By doing so, we maintain our good name and our strong relationships with our customers, stockholders, fellow employees, and the communities we serve.

## Formal policies and procedures implement and enhance governance

Our corporate policies and procedures provide detailed guidance for implementation of our SPIRIT values and The Thoroughbred Code of Ethics. Policies and procedures address topics related to economic, environmental, and social performance.

Norfolk Southern is committed to protecting the quality of the environment for our employees, our customers, and our communities. Specifically, it is our policy to ensure that every employee is trained in and fully understands the environmental requirements of the job and is responsible and accountable for conducting work activities in a manner that meets or exceeds applicable environmental compliance standards.

Our policies protect the environmental quality of Norfolk Southern's real estate 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.

Further, 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.

Norfolk Southern's corporate procedures require that corporate activities must be handled in accordance with these policy objectives, and in compliance 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; and
- 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. Each employee is to regard this effort to attain environmental quality as both a personal and a corporate responsibility, and employees at all levels throughout the corporation have specific responsibilities for implementing the environmental policy. Our corporate policies and procedures are made available to employees on the company's ethics and compliance intranet site.





### Safety comes first

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 that commitment. For 22 consecutive years, Norfolk Southern has earned the E. H. Harriman Award gold medal for the best employee safety record among the largest North American railroads. We expect all of our people to promote safety, as it is both a personal and a corporate responsibility.

This responsibility cannot be transferred. Therefore, each employee is held personally accountable. The company's 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.

We believe that the overall safety and health of our employees is in the best interests of each employee and the corporation.

Safety and health, and all that these terms encompass, have long been of primary importance to Norfolk Southern. In support of this policy, we promote a proactive safety process and will continue 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 corporation 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; and cooperate with all regulatory authorities charged with protecting the safety and health of the public and our employees.



We have an Operations Division Safety Steering Committee that is responsible for interpretation of the 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. The railroad's "Our World Our Choice" environmental reference manual summarizes how the company manages its environmental systems so as to enable local supervisors to 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 posters that are displayed on safety bulletin boards across the system to enhance awareness of current environmental, hazardous material, safety, and security topics of interest.

### 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 therefore can be influenced by a number of external variables over which management has little or no control, including: 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 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.



