



# SUSTAINABILITY REPORT 2008







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# Our Commitment To Sustainability



*Norfolk Southern  
is committed  
to being a  
responsible  
corporate  
citizen of the  
communities  
we serve.  
We appreciate  
the natural  
beauty of the  
environment  
in which we  
operate, and we  
are dedicated  
to preserving  
resources so  
they are passed  
on to future  
generations.*

Companies that incorporate sustainability practices into their business operations strive to be at harmony with the world in which they operate. Norfolk Southern is working hard to achieve this balance. You can read about our progress in this document, our first-ever sustainability report. We have endeavored to make it as comprehensive and transparent in our reporting as we possibly can. From our beginnings in the earliest days of American railroading in the 1830s, Norfolk Southern and the rail industry as a whole have made great leaps toward environmental consciousness. In future reports, we plan to document continuous progress and improvement in sustainability efforts.

So I invite you to take a close look, beginning with our business profile, which is followed by an analysis of our governance structure and management systems. The report next describes the steps Norfolk Southern is taking to achieve sustainable economic, environmental, and social performance. We are particularly proud of the section that highlights some of our people who are making a difference in support of sustainable business practices. It illustrates what I never tire of saying whenever I have the opportunity: The people of Norfolk Southern are the key to our company's success. It's true in our industry-leading safety record, in our financial performance, and in our operating and service efficiency. As you will read, the contributions our people are making toward excellence in sustainability are just as impressive.



It is noteworthy that this report is among the first major accomplishments of a Norfolk Southern sustainability team directed by Blair Wimbush. Blair became the rail industry's first corporate sustainability officer last year, and his appointment signifies Norfolk Southern's commitment to industry leadership in this arena. The team's charge is to measure and manage Norfolk Southern's environmental impact and to strengthen relationships with environmental stakeholders. Our goal is to achieve industry leadership in fuel conservation, emissions reduction, efficient energy use, recycling, use of renewable materials, and environmental partnerships.

Railroads have a proud and storied tradition as an industry that helped build our nation. Just as technology transformed railroad operations, it also made them greener. Today, rail is more vital to our national transportation network than ever, and it is the most energy-efficient and eco-friendly way to transport the goods that move the nation's economy. One train can haul as much freight as 500 trucks. On average, a freight train moves a ton of freight 436 miles on a single gallon of diesel fuel. A typical truck emits three times more nitrogen oxide and particulates than a locomotive, on a ton-mile basis. These clear advantages of rail freight transportation have far-reaching implications for addressing our nation's crowded highways while protecting and conserving natural resources.

Railroads should be leaders of corporate sustainability. Images of freight trains winding their way through scenic vistas in the open countryside are icons of American culture.

Norfolk Southern is at home in the outdoors. Our corporate responsibility—and our mission—is to take care of our home so that future railroaders can sustain our corporate success and the health of our environment.

We believe it is our responsibility to conduct our business in accordance with sustainability practices that will help to provide ongoing opportunities for our people, our communities, our customers and our investors. Environmental stewardship is essential to Norfolk Southern's success, and it reflects our corporate business standards of ethics and responsibility.

Our commitment is long-term. Just as we have served our customers and communities for close to two centuries, Norfolk Southern is dedicated to remaining a responsible corporate citizen for generations to come.



Wick Moorman

*Chairman, President, and Chief Executive Officer  
Norfolk Southern Corporation*

# Our Business Profile

## *Moving the Goods That Move the Economy*

*Our railway transports raw materials, intermediate products, and finished goods in the Southeast, East, and Midwest and, via interchange with rail carriers, to and from the rest of the United States, and Canada and Mexico. Norfolk Southern also transports overseas freight through ports we serve on the Atlantic and Gulf coasts, and West Coast ports served by connections with other carriers. The company provides comprehensive logistics services. The common stock of Norfolk Southern is listed on the New York Stock Exchange under the symbol "NSC."*



**Overview:** Norfolk Southern Corporation is one of the nation's premier transportation companies. Its Norfolk Southern Railway Company subsidiary operates approximately 21,000 route miles in 22 states and the District of Columbia, serves every major port in the eastern United States, and provides superior connections to western rail carriers. Norfolk Southern operates the most extensive intermodal network in the East and is North America's largest rail carrier of metals and automotive products.

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.





## For 2007:

Norfolk Southern's major subsidiary is Norfolk Southern Railway Company. It and its railroad subsidiaries transport raw materials, intermediate products, and finished goods classified in the following market groups, along with the percentage of total railway operating revenues they contributed in 2007: coal (25 percent); intermodal (20 percent); chemicals (13 percent); metals and construction (12 percent); agriculture, consumer products, and government (11 percent); automotive (10 percent); and paper, clay, and forest products (9 percent). Although most of Norfolk Southern's customers are domestic, ultimate points of origination or destination for some of the products transported (particularly coal bound for export and some intermodal containers) may be outside the United States.

This is Norfolk Southern's first sustainability report and covers the reporting period through Dec. 31, 2007, except as otherwise noted. Its content is informed by the Sustainability Reporting Guidelines of the Global Reporting Initiative. Future reports will move toward more comprehensive reporting built on both the principles and content of the Global Reporting Initiative. Our Environmental Protection Department and Environmental Policy Council, comprised of high-level corporate officers, ensure that appropriate policies, procedures and resources are in place to address environmental health and safety considerations across the system. The council, a corporate sustainability team, and a group of core executive sponsors, including the chief executive officer, verified the accuracy and reliability of this report.

**30,806**

Average number of employees

**\$9.4 billion**

Railway operating revenues

**\$2.6 billion**

Income from railway operations

**\$1.5 billion**

Net income

**\$26.1 billion**

Total assets

**\$6.4 billion**

Total debt

**\$9.7 billion**

Stockholders' equity

**39.6%**

Debt-to-total capitalization ratio

**\$25.64**

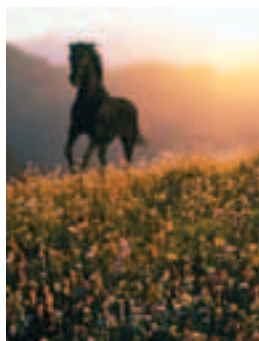
Stockholders' equity per share

Norfolk Southern makes available free of charge through its Web site at [www.nscorp.com](http://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 Web site 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 Governance Structure And Management Systems

*Code of Ethics,  
Core Values Govern  
Employee Conduct  
First and foremost is  
Norfolk Southern's  
Thoroughbred Code of Ethics,  
which is based on our  
Core Values – called SPIRIT,  
for Safety, Performance,  
Integrity, Respect, Innovation,  
and Teamwork.*



**Overview:** Norfolk Southern has corporate policies and procedures guiding its economic, environmental, and social performance. Quality in everything we do is vital to our long-term success. The purpose of our quality policy is to achieve our corporate vision to be the safest, most customer-focused and successful transportation company in the world.

**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.



**T**hese Core Values identify the behaviors that are key to fulfilling our corporate vision. Not intended to be limiting, they provide a framework for Norfolk Southern's expectations for employee conduct. They support our corporate vision and the company's commitment to sustainability.

The Thoroughbred Code of Ethics builds upon the Core Values by providing us with a mutual understanding of how we are expected to conduct ourselves. Norfolk Southern's directors, officers and employees must conduct themselves in accordance with the Core 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.

### *Policies and Procedures Support Corporate Ethics, Values*

Written procedures assist in implementation of Norfolk Southern's Core Values and Thoroughbred Code of Ethics policies. These include policies and procedures such as: Reporting Concerns and Complaints Regarding Accounting, Internal Controls and Auditing Matters; Equal Employment Opportunity; Code of Ethical Conduct for Senior Financial Officers; Conflicts of Interest and Related Person Transactions; Commitment to Ethical Business Conduct; Hazardous Material Incident and Readiness Capability; Antitrust Compliance Guide; Safety and General Conduct Rules; Compliance Procedure; Employee Education Assistance; and others.

Likewise, Norfolk Southern is committed to protecting the quality of the environment for our employees, our customers, and our communities, and we have corporate policies and procedures in place pertaining to environmental performance.

Specifically, it is Norfolk Southern's 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. We 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 and the affected public are informed about any incident relating to Norfolk Southern operations that has the potential to cause environmental harm. 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 the environment;
- protecting people and communities;
- 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. Norfolk Southern posts all our corporate policies and procedures on the company's ethics and compliance intranet site, available to all employees.

## *Safety: Norfolk Southern's first priority*

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 19 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:

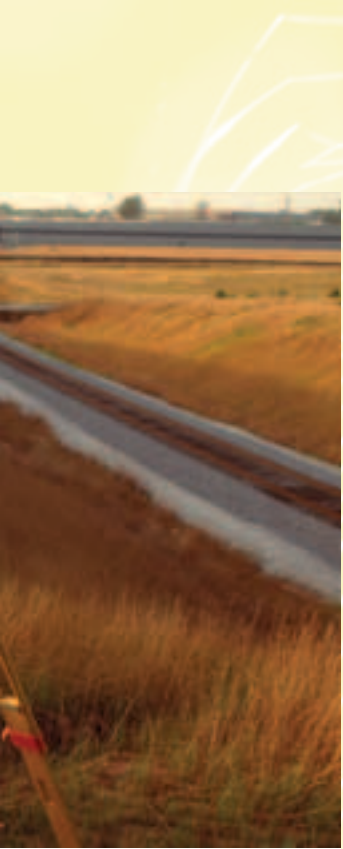
- All injuries can be prevented.
- All exposures can be safeguarded.
- Prevention of injuries and accidents is the responsibility of each employee.
- Training is essential for good safety performance.
- Safety is a condition of employment.
- Safety is good business.

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, Norfolk Southern promotes 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.

## ***Business Partnerships Strengthen Sustainability Efforts***

Norfolk Southern is the first railroad member of S.E.E. Change (Society, Environment, Economy), launched in 2005 by Business Roundtable, an association of 160 chief executive officers representing companies totaling \$4.5 trillion in revenues and nearly 10 million employees, to promote better business and a better world. Norfolk Southern and 31 other leading U.S. companies reported on their ongoing sustainability efforts in Business Roundtable's *"SEE"ing Change: 2008 Progress Report*. Member companies, representing virtually every sector of the economy, outlined their efforts to achieve real environmental and social changes through their commitments to sustainable business practices. Norfolk Southern summarized a wide range of initiatives that are incorporated in this sustainability report. The S.E.E. Change report is part of the membership's ongoing efforts to measure and share sustainability best practices.

Norfolk Southern also is a member of Responsible Care®, a global voluntary initiative of the International Council of Chemical Associations, through which companies work together to continuously improve their health, safety and environmental performance, and to communicate with stakeholders about their products and processes. The Responsible Care ethic helps the chemical industry operate safely, profitably, and with due care for future generations.

Norfolk Southern won the 2007 TRANSCAER® (Transportation Community Awareness and Emergency Response) National Achievement Award. TRANSCAER is a voluntary, nationwide outreach effort that helps communities prepare for and respond to possible hazardous material transportation incidents. Volunteers consist of representatives from chemical producers, distributors, carriers, first responders, and government agencies. Receiving the National Achievement Award signifies widespread recognition of Norfolk Southern's dedication to this critical program and its leadership in training local emergency responders through a combination of hands-on activities, tables top exercises, and whistle-stop tours.

## ***Certifications, Internal Management Systems Safeguard Environment***

Many of Norfolk Southern's facilities are ISO 9001 certified. In addition, the corporation has in place an environmental management system that guides employee behaviors. The policies and procedures that form the building blocks of the environmental management system are codified in a corporate Our World Our Choice Reference Manual. The environmental management system includes policies that define the rules and requirements of the organization, as well as procedures that define implementation. These cover a wide range of issues, including contract control, audit, training, emergency preparedness, regulations, agency approvals, monitoring and measurement, corrective actions, document control, and others.



# Our Performance Indicators



Overview: Norfolk Southern strives to be the transportation industry leader in economic performance and environmental sustainability practices while fostering a workplace where all employees are valued and respected for their unique contributions to corporate goals.

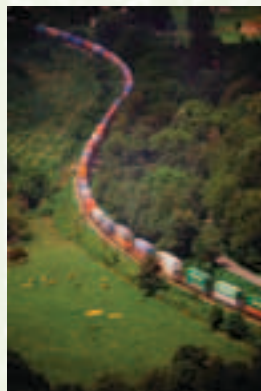
*These values are incorporated in the company's creed:*

- We are responsible to our stockholders, customers, employees, and the communities we serve.
- For all our constituencies, we will make safety our highest priority.
- For our customers, we will provide quality service, always trying to reduce our costs in order to offer competitive prices.
- For our stockholders, we will strive to earn a return on their equity investment that will increase the value of their ownership. By generating a reasonable return on invested capital, we will provide the security of a financially strong company to our customers, employees, stockholders, and communities.
- For our employees, our greatest asset, we will provide fair and dignified treatment with equal opportunity at every level. We will seek a talented, diverse work force and management with the highest standards of honesty and fairness.
- For the communities we serve, we will be good corporate citizens, seeking to enhance their quality of life through service, jobs, investment, and the energies and good will of our employees.



## Our Economic Performance Indicators For 2007:

In 2007, the company set records in railway operating revenues, income from railway operations, and diluted earnings per share. We achieved customer recognition as a leading service provider, and we are committed to continued growth in volume and revenues and to delivering exceptional economic performance by providing superior service.



**Overview:** Norfolk Southern, along with the rest of the rail freight transportation industry, has seen record growth in traffic and revenue, generating strong financial performance and stockholder returns. Fundamental changes in the transportation marketplace play to the strengths of the rail industry. These changes include higher fuel costs, increased highway congestion, and continued shortages of long-distance truck drivers.

Railway operating revenues	\$9.4 billion
Railway operating expenses	\$6.8 billion
Income from railway operations	\$2.6 billion
Railway operating ratio	72.6%
Net income	\$1.5 billion
Earnings per share-diluted	\$ 3.68
Total compensation and benefits	\$2.6 billion
Year-end stock price	\$50.44
Dividends per share	\$0.96
Price/earnings ratio at year end	13.71
Number of stockholders at year end	36,955
Shares outstanding at year end	379,297,891



## If You Use It, Chances Are We Haul It

Freight hauled on the Norfolk Southern railway system is of three major types: general merchandise, intermodal shipments in containers and trailers, and coal. Virtually everything that consumers use in everyday life — from automobiles to furniture and appliances — moves on the railroad. Norfolk Southern moves the goods that move the economy and is a vital link in international commerce.

## General Merchandise Comprises Five Major Commodity Groups

General merchandise traffic is composed of five major commodity groupings: automotive; chemicals; metals and construction; agriculture, consumer products and government; and paper, clay, and forest products. A total of 2.8 million general merchandise carloads accounted for 55 percent of Norfolk Southern's total railway operating revenues in 2007.

**Automotive:** Norfolk Southern is North America's largest carrier of automotive products. Thirteen of the last 23 assembly plants built in the United States were located on Norfolk Southern rail lines, and the company now serves 28 plants. More than 70 percent of automobiles manufactured in North America move via rail. In 2007, Norfolk Southern moved more than 5 million vehicles from the assembly line for delivery to dealers.

**Chemicals:** Chemicals are essential ingredients in millions of consumer products, and they have many industrial uses. When it comes to shipping them, rail is the safest mode of transportation. Norfolk Southern annually presents its Thoroughbred Chemical Safety Award to chemical customers that handle more than 1,000 carloads of hazardous chemicals without incident. Quality service is important as well, as rising energy and feedstock costs place pressure on American manufacturers to compete in the global marketplace. Norfolk Southern helps customers remain competitive by providing excellent service.

**Metals and Construction:** The metals and construction group includes steel, aluminum products, machinery, scrap metals, cement, aggregates, bricks, and minerals. Norfolk Southern leads the industry in the transportation of steel and other metals. The railroad serves 19 integrated mills, 17 minimills, more than 38 major steel processors, and more than 75 steel distribution facilities. Norfolk Southern is working with German steel manufacturer ThyssenKrupp to support a new processed steel plant being built near Mobile, Ala. The plant is expected to be Norfolk Southern's largest-ever industrial development project and one of the largest new plant investments in the United States.



**Agriculture, Consumer Products, and Government:** The country's increasing demand for ethanol and other renewable fuels is driving business for Norfolk Southern—in the transport of ethanol as well as the corn and soybeans needed for its production, and the fertilizer to grow these crops. U.S. production of ethanol is soaring, and producers rely on Norfolk Southern to transport it. Norfolk Southern moves more than a billion gallons of ethanol a year from plants west of the Mississippi to eastern destinations. Another core part of Norfolk Southern's agriculture business is the shipment of corn from the Midwest to the animal feeding, processing, and export markets in the East and Southeast.





**Paper, Clay, and Forest Products:** In addition to serving paper mills, paper distribution centers, and sawmills, as well as transporting lumber, scrap paper, and clay, Norfolk Southern's paper, clay, and forest products business includes the transportation of construction and demolition debris and moving municipal solid waste to certified disposal sites. Norfolk Southern serves more than 60 paper mills and more than 250 paper distribution centers, saw mills, and other construction-related facilities.

## *Coal Contributes 25 Percent of Revenue*

Coal, including coke and iron ore, is Norfolk Southern's largest commodity group as measured by revenues. The company handled 186 million tons in 2007, accounting for about 25 percent of total railway operating revenues. Norfolk Southern trains moved 143 million tons of utility coal in 2007—enough to power more than 32 million homes in the United States for a year. Total coal handled through all system ports in 2007 was 34.1 million tons.

Coal is an abundant fossil fuel. Norfolk Southern's utility customers are engaged in clean-coal initiatives to keep energy reliable and affordable. Norfolk Southern is a partner with groups supporting cleaner utilization of this important resource.

## *Growing Intermodal Traffic Highlights Environmental Advantages of Railway Transportation*



Over the last five years, intermodal has been the fastest-growing part of Norfolk Southern's business. The efficiencies of moving trailers and domestic and international containers by railway demonstrate the environmental advantages of transportation by rail.

For example, the federal Environmental Protection Agency estimates that a typical truck emits nearly three times as much nitrogen oxide and particulate matter as a locomotive on a ton-mile basis. If just 10 percent of the freight that currently moves by truck was diverted to rail, fuel savings would approach 1 billion gallons per year.

Rapid growth and consumer demand are straining transportation networks across the country. Rail transportation helps relieve congestion on the nation's highways, and the EPA has noted that transportation by rail is the more environmentally friendly mode of transportation.

A 2005 Texas Transportation Institute study reported that Americans waste 3.7 billion hours in travel time and 2.3 billion gallons in fuel annually due to highway congestion. A single intermodal train can haul the same volume of freight as nearly 300 trucks. A train carrying freight other than intermodal can take up to 500 trucks off the highway. Freight trains move a ton of freight an average of 436 miles on a single gallon of diesel fuel. Plus, NS' track and infrastructure are privately owned. As public opposition mounts against building more highways through communities, the intrinsic benefits of rail become more apparent.

An expanding world population, an increasingly global economy, mounting congestion on U.S. highways, and the need for improved fuel efficiency – all are factors that are expected to help Norfolk Southern's intermodal business continue to grow. Norfolk Southern handled 3.1 million intermodal units in 2007, which accounted for 20 percent of total railway operating revenues for the year.

Norfolk Southern expects increasing demand for transportation of containerized freight as Asian economies continue to develop, the U.S. returns to a pattern of robust consumption, and its exports continue to increase. Anticipating that growth, Norfolk Southern is working continually to improve service and expand intermodal capacity.



For example, in 2007, Norfolk Southern joined with another railroad, Union Pacific, to introduce a shorter and faster route between Los Angeles and the Southeast. The new route moves over the Meridian Speedway corridor through Shreveport, La. It is almost 150 miles shorter than the previous route and faster than any other service offering in the market. The two railroads plan to expand this already reliable service and further reduce transit times. Improvements to the Meridian Speedway, a joint venture between Norfolk Southern and Kansas City Southern, will create additional capacity that is expected to allow the route to handle international traffic as well.

As part of the Heartland Corridor project, a public-private partnership, Norfolk Southern and the Columbus (Ohio) Regional Airport Authority together developed the Rickenbacker Intermodal Terminal, which opened in 2008. The terminal increases freight capacity in the region by more than 40 percent. The Columbus Regional Airport Authority's adjacent warehouse and distribution complex will serve as Norfolk Southern's first fully integrated intermodal logistics park.



*The Environmental Protection Agency estimates that a typical truck emits nearly three times as much nitrogen oxide and particulate matter than a locomotive on a ton-mile basis. If just 10 percent of the freight that currently moves by truck was diverted to rail, fuel savings would approach 1 billion gallons per year.*

## *Public-Private Partnerships Benefit Communities*

Aging highways, increasing roadway congestion, and surging global trade require new investment in rail capacity to keep the nation's economy growing. To ensure better service for customers, Norfolk Southern is partnering with federal, state, and local governments to design and build major infrastructure projects that will provide a safer, higher-capacity, and more fuel-efficient transportation network.

Norfolk Southern's biggest public-private partnership is the Crescent Corridor, which would provide intermodal rail service connecting underserved markets in the Northeast, the mid-Atlantic, and central Southeast. Stretching 2,500 miles on two routes connecting New Jersey with New Orleans, La., and Memphis, Tenn., the project in its first phase potentially could divert in excess of 1 million trucks a year from highways to rail lines.

Rail hauls less than 5 percent of the long-distance, intercity truck traffic in this corridor, so upgrading the capacity of Norfolk's Southern's routes should result in more regional domestic freight traffic on rail and provide big public benefits.

The project is projected to mitigate highway congestion on I-40, I-81, I-20 west of Atlanta, and I-75 between Knoxville and Chattanooga. Effects on I-85 and I-95 will be less pronounced.



It could take Norfolk Southern 20 years to complete a project of the magnitude of the Crescent Corridor, which could cost more than \$2.5 billion. But with public-private partnerships, the first phase of the Crescent Corridor could be ramped up by 2013.

In addition to diversion of truck traffic from interstate highways, public benefits include creation of new logistics centers across several states. For freight customers, service will be competitive with single-driver truck transit times.

As Norfolk Southern continues to develop and refine the project, the Crescent Corridor already has received public support. Most of the state and federal legislators from the region have expressed interest. Virginia has committed \$40 million in public funding. In the Front Royal, Va., area, Norfolk Southern is constructing a five-mile stretch of double main-line track to speed train traffic on a critical segment of the corridor. Pursuant to its contract with the Virginia Department of Rail and Public Transportation, Norfolk Southern is funding \$20 million.

Another public-private partnership with state and federal governments—the Heartland Corridor—will open up a new gateway for double-stacked container traffic from the East Coast to the Midwest, reducing transit time from the Hampton Roads ports to the Ohio Valley by 24 hours. In October 2007, Norfolk Southern began work on the first of 28 tunnels where vertical clearances are being heightened to accommodate double-stacked container traffic. This is a \$150 million public-private partnership involving contributions totaling \$95 million from the federal government, Virginia, West Virginia, and Ohio. When the project is completed in 2010, trains carrying freight in double-stacked containers will be able to cut more than 200 miles and up to a day's transit time between the East Coast and the Midwest. The project will provide communities along the corridor with greater access to world markets, divert freight from highways, and reduce congestion and fuel emissions.



## *Regulations, Laws Govern 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 federal – and to some extent, state and local – environmental laws and regulations concerning, among other things, emissions to the air; discharges to waterways or groundwater supplies; handling, storage, transportation, and disposal of waste and other materials; and the cleanup of hazardous material or petroleum releases. Norfolk Southern's management practices ensure compliance with these various regulations. We manage in a responsible manner the risks of operating and complying with all regulations.

In addition to public-private partnerships, Norfolk Southern works with other rail carriers to create additional rail infrastructure capacity and improve service. One railroad joint venture, now pending approval of the Surface Transportation Board, is a Northeast corridor between Albany, N.Y., and Boston. It involves more than 400 miles of Pan Am Railways lines in New York and New England. The venture will create a faster, higher capacity railroad for Norfolk Southern to serve these markets :and extend our service reach.

In yet another corridor development announced in 2008, Norfolk Southern joined with 10 New York-based short line railroads to convert short-haul truck movements to rail. This program—known as the Empire Link—allows participating short line railroads to market the excess rail freight capacity on Norfolk Southern's Southern Tier and branch lines between Binghamton and Silver Springs, N.Y. As fuel prices escalate, the Empire Link is an attractive option for shippers currently trucking freight in New York, Pennsylvania, and New Jersey. The project provides our New York short line partners with tools and resources to design and offer rail transportation services that are truck-competitive in lanes that are fewer than 500 miles. The initiative represents a creative new way to partner with smaller railroads to provide services to customers while minimizing congestion and emissions.





## Transporting Hazardous Materials Safely, Securely



Safety is especially critical when it involves transporting hazardous materials. Annually for the last 12 years, Norfolk Southern has recognized the safety performance of our customers who ship more than 1,000 carloads of hazardous chemicals without incident by presenting them the Thoroughbred Chemical Safety Award. We share the public's concerns about the transportation of chlorine and similar commodities designated toxic inhalation hazards, so-called TIH commodities. Because we are required under federal law as a common carrier, Norfolk Southern transports some 23,000 carloads of TIH commodities each year. Many issues surround the transportation of TIH commodities, including safety, routing, notification, custody and security of shipments, and a justifiable balance of financial risk and reward to railroads.

Recognizing that the transportation of TIHs mandated by our common carrier obligation is inherently risky, Norfolk Southern will continue to work to transport TIHs safely and securely even while pursuing policies that reduce and properly allocate those risks.

*Norfolk Southern has gone to great lengths to ensure the safe and secure transportation of TIH commodities.*

*These include:*

- Supporting new design requirements to make tank cars stronger and safer;
- Implementing a comprehensive security plan;
- Coordinating with the Department of Homeland Security, Transportation Security Administration, Department of Transportation, Coast Guard, Customs and Border Protection, FBI, and various state Homeland Security offices;
- Participating in the voluntary Customs-Trade Partnership Against Terrorism program to help ensure integrity of freight shipments;
- Erecting physical barriers and new access control measures, issuing photo ID cards to employees, providing security-specific employee training, and increasing NS police patrol frequency;
- Providing info about TIH shipments to certain government agencies, and upon request to local emergency response agencies, in order to aid in their emergency response preparedness; and
- Working through the Transportation Community Awareness and Emergency Response Program (TRANSCAER) to provide emergency response training, including TIH response, to organizations along the rail network.



## *Railroads Manage Business Risks*

Various risks and challenges are inherent to operation of rail freight transportation companies, including Norfolk Southern. A description of some of these risks follows. The company's most recent annual report on Form 10-K and subsequent quarterly reports on Form 10-Q provide more complete information about these and other risk factors, including risks posed by government regulation and legislation as well as risks associated with the transportation of hazardous materials. We have practices and policies to manage and mitigate the effects of all these potential risks.

**Terrorism or war:** Because Norfolk Southern plays a critical role in the nation's transportation system, it could become the target of an attack or have a significant role in the government's pre-emptive approach or response to an attack or war.

**General economic conditions:** Prolonged negative changes in domestic and global economic conditions affecting the producers and consumers of the commodities Norfolk Southern carries may have an adverse effect on its operating results, financial position, and liquidity.

## **Competition from other transportation providers:**

Norfolk Southern is subject to competition from motor carriers, railroads, and to a lesser extent, ships, barges, and pipelines, on the basis of transit time, pricing, and the quality and reliability of service. While Norfolk Southern typically and primarily has used internal resources to build or acquire and maintain its rail system, trucks and barges have been able to use public rights of way maintained by public entities. Any future improvements or expenditures materially increasing the quality or reducing the cost of other modes of transportation, or legislation granting motor carriers greater latitude on size or weight limitations, could have a material adverse effect on the company's financial position.

**Operations of interchange carriers:** Norfolk Southern's ability to provide rail service to customers in the United States, Canada, and Mexico depends in large part on its ability to maintain cooperative relationships with connecting carriers regarding freight rates, revenue divisions, car and locomotive availability, data exchange and communications, reciprocal switching, interchange, trackage rights, and other matters. Deterioration in the operations or service of those connecting carriers could result in Norfolk Southern's inability to meet its customers' demands or require Norfolk Southern to use alternate train routes, which could result in significant additional costs and network inefficiencies.





**Reliance on technology:** Norfolk Southern relies to a large extent on technology that enhances safety and reliability of many aspects of its rail operations, including dispatching and train control. Significant disruption of the company's information technology systems, including computer hardware, software, and communications equipment, could result in a service interruption, security breach, or other operational difficulties.



**Labor issues:** The vast majority of the employees of Norfolk Southern and other railroads belong to labor unions. Labor agreements, strikes, or work stoppages could adversely affect our operations. Additionally, future national labor agreements, or renegotiation of labor agreements or

provisions of labor agreements, could significantly increase Norfolk Southern's costs for health care, wages, and other benefits.



**Claims and lawsuits:** The nature of Norfolk Southern's business exposes it to the potential for various claims and litigation related to labor and employment, personal injury, commercial disputes, freight loss and other property damage, and other matters. Job-related personal injury and occupational claims are subject to the Federal Employers' Liability Act, which is applicable only to railroads. The variability inherent in FELA's fault-based tort system could result in actual costs being very different from the liability recorded.

**Severe weather:** Severe weather conditions and other natural phenomena, including hurricanes and floods, may cause significant business interruptions and result in increased costs, increased liabilities, and decreased revenues.



**Work force issues:** Work force demographics, training requirements, and the availability of qualified personnel, particularly engineers and trainmen, could have a negative impact on Norfolk Southern's ability to meet demand for rail service. Unpredictable increases in demand for rail services may exacerbate such risks.

**Fuel and other supply markets:** Norfolk Southern consumes about 500 million gallons of diesel fuel each year, and the company is working on many fronts to reduce this consumption. Fuel availability could be affected by any limitation in the fuel supply or by any imposition of mandatory allocation or rationing regulations. A severe fuel supply shortage arising from production curtailments, disruption of oil imports, disruption of domestic refinery production, damage to refinery or pipeline infrastructure, political unrest, war, or otherwise could adversely affect Norfolk Southern, its customers, and other transportation companies. Due to the capital intensive nature and industry-specific requirements of railroads, high barriers of entry exist for potential new suppliers of core railroad items, such as locomotives and rolling stock equipment. Additionally, Norfolk Southern competes with other industries for available capacity and raw materials used in the production of certain track materials, such as rail and ties. Changes in the competitive landscapes of these limited-supplier markets could result in increased prices or material shortages.

# Our Environmental Performance Indicators

We are committed to monitoring the success of our environmental performance by measuring and tracking appropriate metrics. In this our first corporate sustainability report, we present the metrics we now have, with a goal of showing continuous improvements in collection and reporting of data as well as in our record of environmental stewardship. Future reports will reflect expanding use of the reporting principles as we move toward more comprehensive coverage of economic, environmental, and social performance.



**Overview:** Norfolk Southern is committed to being an industry leader in environmental responsibility. Strong sustainability practices are good for our business, the economy, and the environment, and they benefit our people, the communities and customers we serve, and our stakeholders.

## *Focus on Eco-Friendly Purchasing Practices*

Norfolk Southern is a major provider of transportation services in North America and operates more than 22,000 route miles. Maintaining this infrastructure requires us to procure significant amounts of crossties, rail, and stone ballast.

## Material purchases for 2007:

Crossties replaced	2.8 million
Board feet of switch and bridge ties replaced	10.1 million
Rail replaced	401 miles
Tons of ballast placed	2.9 million

Throughout our system, we use recycled materials, such as paper and packaging. In 2007, 7 percent of the paper, packaging, and office supplies we purchased included recycled or recovered materials. We recycle brake shoes systemwide, and before we dispose of oil filters, we crush the oil from them to reduce landfill contamination. We also recycle used oil from our major locomotive shops. At our Chattanooga shop, we reclaimed 50,900 gallons of engine oil in 2007 for reuse in locomotives.



**In 2007:**

**500.4 million**  
Gallons of diesel fuel

**11.3 million**  
Gallons of gasoline

**1.5 million**  
Gallons of propane  
and heating oil

**480.7 million**  
Kilowatt-hours  
of electricity

**372.6 million**  
Cubic feet of  
natural gas

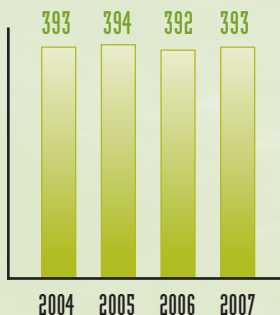
## *Maximizing Efficiencies of Rail Transportation*

Energy is necessary to move the goods that move the economy. Norfolk Southern consumes diesel fuel to operate our trains and electricity to power our buildings and systems. The accompanying tables show our fuel and electricity consumption totals for 2007 and our fuel use per million dollars of revenue, and revenue ton-miles per gallon of diesel for the last four years. We strive to minimize our energy use and maximize the efficiencies that are innate to rail transportation by continuously focusing on reducing locomotive idling time, improving locomotive power utilization, and deploying train handling tools that plan for and deliver reductions in consumption of diesel fuel across our system.

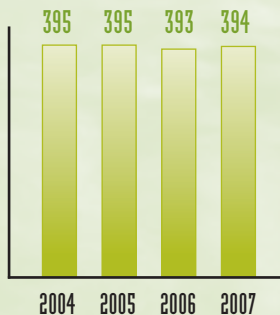
Transporting freight by rail is more fuel-efficient, and therefore less carbon-intensive, than transporting freight by truck. In 2007, Norfolk Southern moved an average of 394 revenue ton-miles (one ton of freight moved one mile) of freight on a gallon of diesel fuel. The average combination truck moves only about 118

revenue ton-miles  
of freight per gallon  
of diesel consumed.

**Net Ton-Miles  
Per Gallon Diesel Fuel**



**Revenue Ton-Miles  
Per Gallon Diesel Fuel**



As our business grows, so does our energy consumption. Our innovative train-handling systems, such as LEADER – which uses an onboard computer to calculate optimum train speed – will help Norfolk Southern maximize our energy and fuel efficiency while providing services critical to a healthy economy.

Norfolk Southern's fleet of motor vehicles, such as cars and trucks used by railroaders in supervising and maintaining our 22,000 mile rail system, includes hybrid vehicles, such as the Ford Escape. In 2007, we added 97 hybrid on-road vehicles to our fleet. The company is evaluating the performance of the hybrids and reviewing the entire fleet of on-road vehicles to ensure that each vehicle is suitable for its predominant use. Among the factors we are evaluating are size, weight, horsepower, fuel type, and efficiency.

## **Energy use per million \$ of revenue:**

Diesel fuel per million  
dollars of revenue **53,053 gallons**

Gasoline per million  
dollars of revenue **1,198 gallons**

Propane and heating oil  
per million dollars of revenue **164 gallons**

Electricity per million  
dollars of revenue **50,965 kilowatt-hours**

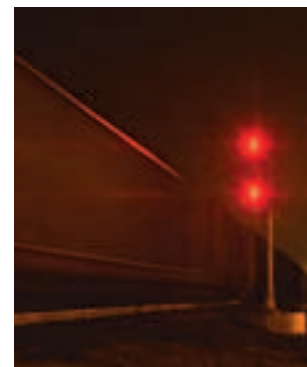
Natural gas per million  
dollars of revenue **38,000 cubic feet**

## Today's Technology Colors Locomotives Green

Technology continues to transform the rail industry into a much more eco-friendly business than it was when steam locomotives belched smoke and cinders into the air. Norfolk Southern is equipping some of its locomotives with generator-set engines—a technology that saves fuel, reduces emissions, and operates more efficiently. Unlike conventional locomotives that have a single engine, locomotives with “gen-sets” are powered by up to three 700-horsepower diesel engines. With multiple engines, we can modulate the number of engines used at any given time, depending on the horsepower needed. The second and third engines come on line using microprocessor controls only as demand requires. That allows us to burn less fuel, resulting in fewer emissions and greater efficiency. Gen-set equipped locomotives are expected to reduce emissions of oxides of nitrogen by up to 80 percent and particulate matter by up to 90 percent, and reduce fuel consumption by up to 40 percent.

The gen-set engine is just one example of how Norfolk Southern is enhancing operating performance through the use of leading-edge technology. Here are some others:

- A technology known as LEADER, which uses an onboard computer to calculate the optimum speed at which a train should travel. LEADER stands for Locomotive Engineer Assist Display Event Recorder. The system functions using mathematical formulas to calculate optimal train-handling methods in real time, based on line segment grade and curvature. The information is displayed directly to train crews, helping them conserve fuel and reduce emissions.
- Norfolk Southern has adopted widespread use of locomotive idling reduction technologies and procedures to cut down on run times for locomotives, reducing fuel consumption and emissions. The technologies include automatic engine start-stop systems, and auxiliary power units that keep engine coolant warm, permitting main engine shutdown even in freezing temperatures. Approximately half of our locomotives assigned to rail yards and local train operations are equipped with idle reduction technologies, and more locomotives are being equipped continuously.
- The Unified Train Control System is a train dispatching system that automates basic train movement instructions and provides tools for planning efficient operations.
- Closely integrated with the Unified Train Control System is another state-of-the-art system, Optimized Train Control, which provides a safer environment for train operations. The system captures data from onboard and trackside monitors, integrates it with Norfolk Southern's central computer systems, then analyzes it to alert the train crew and dispatcher when unsafe conditions arise. The system enforces safe operating practices by automatically braking a train to a safe stop if corrective actions are not taken in response to the alerts. Norfolk Southern is testing the Optimized Train Control system on one operating division, with a future goal of systemwide implementation.
- Electronically controlled braking systems and wireless communications are among still other technologies being evaluated for their effectiveness in improving efficiency, reliability, and safety, and in reducing emissions.







## *Lighting the Way to Energy Savings*

Norfolk Southern is committed to reducing energy consumption in its office buildings. The latest technological advances in lighting systems have been deployed to save energy costs, reduce the company's carbon footprint, and benefit local communities – all while improving overall lighting.

In 2007, Norfolk Southern embarked on a systemwide two-year initiative to replace and upgrade lighting in all offices, shops, and yard facilities. The project covers 600 buildings plus yard facilities at 300 Norfolk Southern locations. In addition to producing savings in utility bills, lowering maintenance costs, and improving lighting, the project serves to reduce greenhouse gas emissions as less energy is required to light the company's facilities.

Localities further benefit as planners work to avoid over-lighting outdoor company facilities, lessening the impact on adjacent communities.

Converting existing lighting to newer, more energy efficient technologies will result in substantial savings in Norfolk Southern's annual electric bill, about 40 percent of which goes for lighting its facilities systemwide. The newer systems combine use of more efficient fluorescent technologies with pulse-start metal halide lighting. The metal halide produces a more people-friendly white light, and the pulse-start technology gives instant startup and reduced energy consumption. The end results are more light with less power, and more effective light distribution.



## *Here is a summary of some of the annual benefits of the lighting upgrade project:*

- Estimated energy consumption savings of 50 million kilowatt-hours
- Reduce carbon dioxide emissions by 76 million pounds
- Reduce nitrogen oxide emissions by 105,150 pounds
- Reduce sulfur dioxide emissions by 271,800 pounds
- Emissions reductions equivalent to removing 4,325 cars from the road

Norfolk Southern also is installing occupancy sensor controls throughout its facilities. Occupancy sensors automatically control lighting by turning lights off when spaces are unoccupied. The sensors give building operators additional opportunities to improve energy savings without compromising lighting for building occupants.



## *Conserving Water Use*

Though not a major industrial consumer of water, Norfolk Southern is working to establish a mechanism to track water use systemwide. In our major office locations, measures are under way to complete installation of water-saving faucets and toilets, reducing water consumption at these facilities. For example, in our general office building in Atlanta, we installed waterless urinals. And, at many of our major yard installations, where water is used for heating, cooling, equipment washing and maintenance, and sanitary purposes, we have installed new meters, updated piping, and located and repaired leaks, reducing our water consumption.

## *Reducing Greenhouse Gas Emissions*

Greenhouse gas emissions are directly related to fuel consumption. Because railroads are, on average, three or more times more fuel efficient than trucks on a ton-mile basis, railroads have a smaller carbon footprint. Every ton-mile of freight that moves by rail instead of truck reduces greenhouse gas emissions by two-thirds or more. According to Environmental Protection Agency data, freight railroads account for just 2 percent of U.S. greenhouse gas emissions from transportation sources and well under 1 percent of greenhouse gas emissions from all sources.

By taking steps to attract more freight to railroads, policymakers can expand the greenhouse gas emissions benefits of rail transportation. Transportation-related greenhouse gas reductions would accrue more quickly if tax incentives for projects that expand rail capacity were instituted and if more public-private partnerships for freight railroad infrastructure projects were implemented.

Based on data from the American Association of State Highway and Transportation Officials, for each 1 percent of long-haul freight currently moving by truck that moved by rail instead, fuel savings in the U.S. would be approximately 111 million gallons per year, and annual greenhouse gas emissions would fall by 1.2 million tons. If 10 percent of long-haul freight now moving by truck moved by rail instead, annual greenhouse gas emissions would fall by more than 12 million tons.

Locomotive power is the most fuel efficient means to transport goods in North America, and this fuel efficiency minimizes the effect railroad transportation has on greenhouse gases. Norfolk Southern anticipates deploying additional reduction technologies, further minimizing greenhouse gas emissions even as our business grows, along with the number of rail cars transported.



## U.S. railroad transportation-related greenhouse gas emissions \*

2005	2006	2007
56.7	58.9	58.0
Total		
49.8	51.8	50.8
Carbon dioxide CO <sub>2</sub>		
0.1	0.1	0.1
Methane CH <sub>4</sub>		
0.4	0.4	0.4
Nitrous Oxide N <sub>2</sub> O		
6.4	6.5	6.6
Hydrofluorocarbons HFCs		

Emissions are in million metric tons

\* Includes emissions from diesel- and electric-powered locomotives operated by freight and passenger railroads. 2008 data not available.

**Source:** U.S. Environmental Protection Agency

## Locomotive Emissions Factors:

1,008

Grams of CO<sub>2</sub>  
per gallon of diesel

0.8

Grams of CH<sub>4</sub>  
per gallon of diesel

0.26

Grams of N<sub>2</sub>O  
per gallon of diesel

595

Tons of CO<sub>2</sub>e  
from the combustion  
of diesel fuel in  
locomotives per  
million dollars of  
revenue in 2007

**Data:** Click on this link for the U.S. Environmental Protection Agency's report entitled, "Direct Emissions from Mobile Combustion Sources:"  
[www.epa.gov/stateply/documents/resources/mobile-source\\_guidance.pdf](http://www.epa.gov/stateply/documents/resources/mobile-source_guidance.pdf)

## Tracking Recyclable Materials

Norfolk Southern does not have a process for tracking the total amount of general office and yard waste generated by our operations. We anticipate being able to do so by the end of 2008.

However, we currently track the amounts of crossties, scrap steel, and batteries recycled on an annual basis.

In 2007:

1.1 million

Crossties utilized for energy recovery

868,000

Crossties sold for landscaping

201,000

Crossties used in internal cascading efforts

179,000

Tons of metal recycled

225,000

Tons of scrap steel recycled

923,500

Pounds of batteries recycled, resulting in 465,164 pounds of lead, 61,766 pounds of cadmium, and 83,510 pounds of nickel not disposed in landfills

## *Protecting Water Sources and Related Ecosystems and Habitats*



Norfolk Southern's system operates through many areas in the eastern United States, including along large and small waterways. Several of our 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 more than 168 water discharge permits in place that govern the quality of our water discharges and protect the environment. Typical water discharges from our facilities include treated wash water, water from repair and maintenance operations, sanitary water, and storm water. 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 substances, either diesel fuel or a commodity being carried by the train, to a waterway. In such cases, we respond immediately to the scene to minimize and remediate any releases, working closely with regulatory agencies to restore the affected environment.

## *Reporting All Spills*

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, working closely with regulators to ensure that the environment is restored.

## *Taking Steps to Avoid Significant Environmental Impacts*

Norfolk Southern is a railroad company that transports a variety of commodities safely and efficiently across North America through the use of locomotive power. By far, the most significant environmental impact of transportation by rail relates to fuel consumption. Simply put, diesel fuel is necessary for current rail technology and is one of our biggest expenses in providing the transportation services that keep our economy moving. The good news is that transportation by rail is far more efficient in terms of fuel consumption than the alternative, trucking. And that is good for the environment.

Still, Norfolk Southern employs many programs and technologies that make us even more efficient consumers of diesel fuel, saving money and improving the environment. For example, in addition to using the latest locomotive technology described elsewhere in this section, Norfolk Southern is a member of the federal Environmental Protection Agency's "SmartWay Transport" partnership. As part of the partnership, Norfolk Southern and other freight





transporters have committed to evaluating the environmental impacts of their operations and have agreed to work with the EPA to develop and implement plans to improve fuel efficiency and reduce emissions in coming years.

Norfolk Southern also joined the Social, Environmental and Economic (S.E.E.) Change initiative of Business Roundtable, an effort among major American companies to promote sustainable growth. Norfolk Southern is one of 32 member companies of S.E.E. Change, begun in 2005 to demonstrate how commitments to society and the environment can be compatible with business and economic growth.

For every truckload that is transferred to rail, the supply chain becomes even greener through reduced emissions and more efficient use of fuel. Norfolk Southern's carbon footprint analyzer, or "Green Machine," illustrates how shippers can reduce emissions as rail becomes a larger component of supply chains. The Green Machine appears on the company's sustainability Web site at [www.nscorp.com/footprints](http://www.nscorp.com/footprints). 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.

As Norfolk Southern continues its efforts to expand and serve more markets, we anticipate additional loads will be converted to rail, easing traffic congestion on our highways and reducing greenhouse gases. The continued development of public-private partnerships, as described elsewhere in this sustainability report, will achieve these benefits while enhancing our national economy.

Norfolk Southern engages in outreach efforts in the communities we serve. These efforts include developing and presenting training programs for local emergency management agencies and other responders, such as local police and fire departments.

Many of these training opportunities are provided as a result of Norfolk Southern's support of the TRANSCAER program, a national effort that focuses on assisting communities to prepare for and respond to hazardous materials transportation incidents. TRANSCAER, which stands for Transportation Community Awareness and Emergency Response, is a program of the American Chemistry Council. Norfolk Southern programs on behalf of TRANSCAER range from classroom sessions to full-scale outdoor drills to special whistle-stop trains. Norfolk Southern is a multiple winner of TRANSCAER's National Achievement Award. Norfolk Southern also sponsors annual training for first responders across the country at the Emergency Response Training Center at Pueblo, Colo.

## *Responding When Accidents Occur*

While rare, accidents do occur that result in significant releases of hazardous materials to the environment. In January 2005, a derailment of a Norfolk Southern train at Graniteville, S.C., resulted in a release of chlorine vapor. Norfolk Southern operating, safety and environmental, and police forces immediately went to the scene to work with local emergency responders, hazardous materials contractors, and federal, state, and local officials.

This was one of the most significant rail incidents ever to occur on Norfolk Southern. The accident resulted in the deaths of nine people, including a Norfolk Southern locomotive engineer. Some 250 people were injured, including a Norfolk Southern conductor, and approximately 5,400 residents were evacuated.

One of the many outcomes of the Graniteville release has been an increased national focus on the safe transportation of “toxic by inhalation” compounds, which by federal law, railroads are required to transport.

In June 2006, a Norfolk Southern train derailed near Keating Summit, Pa., causing a release of 42,000 gallons of sodium hydroxide to a creek in northwestern Pennsylvania. Today, the area and waterway impacted by the incident have significantly recovered.







While these incidents were serious, the fact remains that rail is the safest form of freight transportation available in North America. To ensure this, we have comprehensive security plans in place, and all of our employees receive regular training in safety and security. We also coordinate closely with the municipalities we serve, providing hazardous materials response training in many locations each year. In 2007, we conducted 120 programs, including drills and training classes in 18 states, attended by more than 5,000 local, state, and federal responders from 164 cities and counties in those states and adjoining states. The programs totaled more than 23,000 man-hours of instruction.

We work closely with the government to ensure compliance with safety and security regulations governing rail operations and the transportation of hazardous materials. As one notable example, a Norfolk Southern police special agent has been assigned to the National Joint Terrorism Task Force operating out of FBI headquarters in Washington, D.C., to serve as liaison to the North American rail industry. This arrangement improves logistical flow of vital security and law enforcement information with respect to the rail industry as a whole, and has fostered a strong working relationship between the FBI and Norfolk Southern.







## *Environmental Penalties Paid*

Norfolk Southern works diligently to ensure that our facilities and operations comply with environmental laws and regulations. We routinely audit our own operations to ensure compliance and to prevent the potential for unacceptable conditions to arise. Also, we are inspected on an ongoing basis by regulatory agencies and, on occasion, fined. However, of 25 governmental inspections conducted in 2007, none resulted in the issuance of a fine or penalty.

Notwithstanding the company's efforts to ensure compliance with all environmental laws and regulations, Norfolk Southern sometimes pays penalties to resolve enforcement matters brought by state and federal regulators in connection with the environment.

Following are summaries of environmentally based penalties Norfolk Southern paid in 2007. The company managed and remediated the environmental impacts of each incident in cooperation with regulatory agencies.

- In August, Norfolk Southern entered into a settlement agreement with the Pennsylvania Department of Environmental Protection resolving alleged violations of state environmental laws in connection with three derailment-caused spills in western Pennsylvania. Pursuant to the agreement, a civil penalty in the amount of \$575,000 was paid to the state's Clean Water Fund.
- In October, Norfolk Southern and the Western New York & Pennsylvania Railroad entered into a settlement agreement with the Seneca Nation of Indians, which issued a pollution ticket against the two railroads for a coal spill arising out of a Jan. 26, 2006, train derailment on Seneca Nation territory. A \$25,200 penalty was paid to the Seneca Nation under the agreement to cover response costs, restoration, and to resolve a pollution ticket.
- In November, Norfolk Southern entered into a settlement agreement with the commonwealth of Pennsylvania in connection with the June 2006 derailment that caused a release of sodium hydroxide near Keating Summit, Pa. Pursuant to the agreement, Norfolk Southern paid approximately \$7.35 million in restitution to compensate for natural resource damages and state agency response costs caused by the derailment and spill. Norfolk Southern also pled no contest to three misdemeanor charges and paid fines in the amount of \$250,000 to resolve them.

## *Minimizing Hazardous Waste Generation*

Due to process changes and product substitution in 2007, Norfolk Southern had only one facility that was considered a large-quantity generator of hazardous waste (2,200 pounds generated in any given month). This waste consisted of waste paint and solvents generated by painting locomotives and business cars. There were eight small-quantity (220 to 2,200 pounds) generators of hazardous waste sites on our system. This waste consisted of bridge waste and other small quantities of waste. Wastes generated by all Norfolk Southern facilities are managed and disposed in compliance with all applicable laws and regulations.

## *Using Renewable Energy Sources*

Norfolk Southern constantly searches for new ways to deploy renewable energy sources. For example, we installed a 50-kilowatt wind turbine at our yard in Bellevue, Ohio, that generates the electricity to run the yard's wastewater treatment plant. The wind turbine consists of three 24-foot rotor blades mounted on an 80-foot tower and is estimated to generate more than 100,000 kilowatt hours annually. Solar energy is used in many locations along our rail system to power rail lubrication devices necessary to reduce friction and enhance fuel efficiency. Solar energy is used also to generate the electricity that runs our wastewater treatment plant in Birmingham, Ala. Our Research and Tests Department evaluates all new technologies and equipment for their capability to be powered by solar energy.



## *Investing Millions For Environmental Initiatives*

Every year, Norfolk Southern spends significant funds on environmental capital and remediation projects. In 2007, the company invested \$5.8 million on projects such as wastewater treatment plant upgrades, above-ground storage tank dike liners, tank car spill pans, and other equipment and projects. In addition, \$13.5 million was spent in 2007 on remediation projects, including the cleanup of spills and historic conditions, underground storage tank removal, and building demolition.

## *Quiet Zones Help Reduce Community Noise*

Locomotive horns are a key part of crossing safety and are necessary to alert motorists to oncoming trains at highway-rail grade crossings. Federal regulations permit municipalities to create "quiet zones," provided certain conditions are met. Norfolk Southern cooperates with municipalities in this regard, and in 2007, 25 quiet zones were in effect on our system. In addition, Norfolk Southern complies with idling requirements imposed by federal regulators on our operations. Idling reduction initiatives primarily designed for fuel efficiency have the added benefit of reducing locomotive engine noise from idling.





## *Supporting Use of Public Transit*

Rail is a superior form of transportation when it comes to mitigating traffic congestion and reducing emissions from motor vehicles. As noted elsewhere in this sustainability report, Norfolk Southern is pursuing public-private partnerships and other rail capacity projects to take advantage of the efficiencies and environmental advantages of rail freight transportation.

The company also is helping its employees take advantage of public transit opportunities where available. Through a program launched in 2006, Norfolk Southern employees can purchase passes for mass transit systems on a pretax basis for their commute to work.

Using mass transit helps preserve natural resources and ease traffic congestion. In addition, purchasing transit passes with pretax dollars means individual savings of between 20 percent and 40 percent, depending on an individual's income tax bracket. The Web-based system offers passes for qualified work-related commuting on mass transit systems such as Atlanta's MARTA, Hampton Roads' HRT, Philadelphia's SEPTA, AMTRAK, and others.

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

Four guiding principles govern Norfolk Southern's consideration of proposals to operate passenger service on our freight lines. They are:

- Transparency of passenger train operations to our freight operations, meaning that sufficient infrastructure is provided for passenger trains and freight trains to operate without delay to either, and to allow for the growth of both;
- Fair value for use of our assets;
- Full liability protection; and
- No subsidy by Norfolk Southern of passenger operations.

## *Engaging in Sustainable Real Estate Practices*

Norfolk Southern protects its natural assets by practicing environmentally safe methods to limit erosion and control vegetation. As a large private landowner, Norfolk Southern also continually looks for ways to redevelop former railroad property, whether operating property or former tenant land. In 2007, the final phase of a long-standing Norfolk Southern redevelopment project, the Carlyle redevelopment in Alexandria, Va., was begun. This 76-acre former railroad operating property has been redeveloped under the oversight of the Virginia Department of Environmental Quality and now includes mixed commercial and residential uses and government office space. In recent years, at the request of states or local municipalities, Norfolk Southern has partnered to turn hundreds of miles of former railroad rights of way into hiking, biking, and walking trails. Recent notable examples include the Gastonia (N.C.) Rail Trail and the Roanoke (Va.) River Trail.



# Our Social Performance Indicators

Norfolk Southern is committed to a vision to “be the safest, most customer-focused, and successful transportation company in the world.”

## Safety Is Top Priority

Norfolk Southern takes special pride in its employee safety record. For 19 consecutive years, the people of Norfolk Southern have

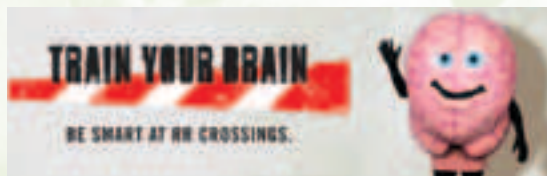
**Overview:** As a major U.S. corporation with more than 30,000 employees — nearly 85 percent of whom are members of labor organizations and covered under collective bargaining agreements — and with operations in 22 states and the nation’s capital, Norfolk Southern recognizes its responsibility to foster a safe work environment that treats everyone with respect and cultivates diversity as a strength of the organization while enhancing the quality of life in the communities it serves.

earned the rail industry’s top award for employee safety, the prestigious E.H. Harriman Award gold medal. Norfolk Southern’s strong safety culture has set the standard for railway workplace safety.

The Harriman Awards were founded by the late Mrs. Mary W. Harriman in memory of her husband, Edward H. Harriman, a legend in American railroading. Today, the awards are administered under the auspices of the E.H. Harriman Memorial Awards Institute, with support from the Mary W. Harriman Foundation.

Employee safety has contributed to other safety records by American railroads, which reported the lowest train accident rate and the lowest grade crossing accident rate in history in 2007. The total number of fatalities from all rail-related incidents also was at a record low.

Norfolk Southern is committed to public safety efforts to eliminate injuries and deaths resulting from collisions between motor vehicles and trains at highway-rail grade crossings, as well as from trespassing on railroad property. Since the early 1970s, the company has supported Operation Lifesaver Inc., an international nonprofit education and awareness program dedicated to ending tragic collisions, fatalities and injuries at highway-rail grade crossings and on railroad rights of way. In 2007, Norfolk Southern launched “Train Your Brain,” a safety awareness campaign encouraging people to be smart around highway-rail grade crossings. Targeting college students and the general population, the campaign features a costumed “Brainy” character who makes public appearances, and a novel Web site at [www.brainysworld.com](http://www.brainysworld.com).



## Norfolk Southern Employee Injury Data For 2007:

2

Work-related fatalities

1.16

Injuries per 200,000 man-hours

370

People injured

15

People with restricted activity

69

People requiring medical attention

286

People who lost time due to injury

## Training Strengthens Operations

Training is essential to Norfolk Southern's operations. For every new hire in the agreement (union) work force, that 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.

Employee training and development does not begin and end with new hires. Thoroughbred School, Norfolk Southern's innovative approach to workforce development, opened in February 2007. Management employees from across the company gather in Norfolk for four-day sessions that help them gain a broader understanding of Norfolk Southern – from financials to operations to the global economy's impact on the business. Norfolk Southern also

supports employee education and development through a tuition reimbursement program.

### *Selected training data:*

- Average annual number of training hours per management employee is **62**.
- Average annual number of training hours per union employee in the Transportation Department is **26**.
- Average annual number of training hours per union employee in the Mechanical Department is **75**.
- Average annual number of training hours per union employee in the Engineering Department is **92**.

## Supporting Equal Opportunity and Affirmative Action

Norfolk Southern complies with all applicable laws, regulations, and executive orders concerning equal opportunity and nondiscrimination, and the 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, 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 fully 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 EEO staff meets with department supervisors to make certain the corporation's EEO policy is being followed. Company representatives explain the EEO policy thoroughly 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 the corporation's commitment on EEO matters.

The EEO staff is responsible for auditing implementation of the corporation's Office of Federal Contract Compliance Programs' affirmative action program. The auditing process includes: (a) monitoring records on referrals, 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.

The EEO staff maintains a record of complaints of discrimination. A monthly report is generated showing the numbers and status of complaints handled during the month. The report is circulated to appropriate personnel in the corporation.

## Norfolk Southern Embraces Diversity

Diversity is the collective mixture of similarities and differences that impact our work force, workplace, and marketplace. Managing diversity is a continuous process to recognize, cultivate, and use all the best talents of our employees. Diversity produces better business outcomes by using everyone's talents and perspectives to improve service and the bottom line.

Through diversity, we create an environment in which everyone is treated fairly and with respect, in which all people are recognized and rewarded based on their unique abilities and contributions, and in which everyone has equal opportunity for growth and advancement.

The Diversity Council at Norfolk Southern is a corporate-sponsored group of selected employees who represent a demographic cross-section of the organization. The Diversity Council assists the company's efforts to create a more inclusive and productive workplace. It works to foster a climate of fairness, mutual respect, and professionalism for all employees.

Norfolk Southern also has a women's network, WiNS, that is open to all employees. WiNS gives Norfolk Southern a competitive advantage by empowering employee leadership, development, and networking.

## Norfolk Southern has identified several diversity goals to support the company's business objectives:

- Maintain an inclusive work environment that promotes respect among employees throughout all levels of the organization, thus enhancing the safety, creativity, productivity, and job satisfaction of every employee.
- Capitalize on diversity as a business practice that improves the bottom line.
- Develop everyone's best abilities and fully recognize everyone's talents.
- Make Norfolk Southern the employer and service provider of choice.
- Attract and retain a qualified and diverse work force, and cultivate respectful and effective leaders.
- Participate in community and customer outreach.
- Promote the development of diversity by educating employees on the benefits of a diverse work force.

## Norfolk Southern Work Force Demographics

All Employees <i>(as of Aug. 2008)</i>	30,206	28,155	2,051	25,488	4,170	312
Senior Management <i>(board-appointed officers)</i>	31	28	3	26	3	2
Board of Directors	11	10	1	9	2	0
Governance and Nominating Committee	5	4	1	5	0	0
Audit Committee	4	4	0	2	2	0
Compensation Committee	4	4	0	3	1	0
Executive Committee	5	5	0	4	1	0
Finance Committee	5	4	1	4	1	0
	TOTAL	MALE	FEMALE	CAUCASIAN	BLACK	HISPANIC



## *Offering an Attractive Employee Benefits Package*

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, which 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. The company contributes annually per employee for these benefits, and employees contribute annually as well. More than half of the railroad’s unionized employees are covered by one of several short-term disability supplemental sickness benefit plans, to which the railroad contributes annually per employee. Unionized employees also are eligible to participate in a 401(k) pretax savings plan with a company match.

For management employees who are not members of a union, called nonagreement employees, Norfolk Southern provides medical, mental health and substance abuse, prescription drug, dental, vision, and life insurance benefits. The company contributes annually per employee for these benefits after a salary-based contribution by the employee. 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) savings plan in which the company will match 100 percent of the first 1 percent contribution and 50 percent on additional contributions up to 6 percent, or a total of 3.5 percent of eligible pay. The defined benefit retirement plan for nonagreement employees is fully funded by 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. Norfolk Southern contributes on average approximately \$50 per employee. The company also offers an employee 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.

Employees in the railroad industry pay Railroad Retirement Taxes instead of FICA taxes under Social Security. While payroll taxes for Railroad Retirement are slightly higher, the benefits at retirement are significantly greater. In addition to a retirement benefit that is equivalent to Social Security, railroad employees receive an additional benefit based on railroad earnings.



## *Self-Imposed Checks and Balances on Political Contributions*

The Norfolk Southern board of directors has authorized the company to make contributions 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. Such contributions are made pursuant to a procedure whereby:

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

Norfolk Southern utilizes the services of an outside vendor to provide administrative support and backup review of applicable legal requirements and restrictions, and to assist in meeting all reporting requirements.

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 pursuant to a procedure whereby:

The GGF utilizes the services of an outside vendor to provide administrative support and backup review of applicable legal requirements and restrictions, and to assist in meeting all reporting requirements.



## *Compliance with Antitrust Laws*

Antitrust laws were enacted to promote free and fair competition. These laws regulate what Norfolk Southern and its employees can do when acting alone or with our competitors. Antitrust laws prohibit conduct that goes beyond fair competition and is designed to harm a competitor, to drive a competitor out of business, or to prevent new competition. It is the policy of Norfolk Southern to comply fully with all applicable federal and state antitrust laws. No officer or employee is permitted or authorized to take any action inconsistent with the antitrust laws or to permit or order others to take such an action. Application of antitrust laws to particular facts rarely is simple, particularly in the railroad industry where connecting railroads must work together to move customers' freight. Whenever any officer or employee believes that proposed activity raises antitrust questions, they are instructed to contact the Law Department, where designated attorneys can assist to ensure that we comply with the law and company policy. In 2007, there were no findings of antitrust violations by Norfolk Southern.

## *Communities, Customers, Industry Recognize Norfolk Southern Contributions*

Norfolk Southern seeks to enhance the quality of life of the communities it serves while providing superior service to its customers. Aside from corporate contributions for which Norfolk Southern has received recognition, the company's employees serve their communities in many ways, from serving on boards to volunteering their time and resources to a multitude of local organizations.

### *Here are awards Norfolk Southern and its employees received recently.*

- E.H. Harriman Gold Medal Award for the best employee safety record of the largest railroads in North America. It was the company's 19th consecutive Gold Medal.
- Tom Davis, a recently retired Norfolk Southern assistant manager hazardous materials, received the Association of American Railroads' Holden-Proefrock Award, presented annually to a person associated with the railroad industry who has made significant contributions to hazardous materials transportation safety throughout his career.
- G.I. Jobs magazine ranked Norfolk Southern among the top 50 military-friendly companies for 2007. The annual list acknowledges companies that have made the greatest effort and had the greatest success in hiring military veterans, and that have the best policies for Reserve and Guard members called to active duty. This is the second time Norfolk Southern has earned a spot on the list. Norfolk Southern actively recruits people with military backgrounds for careers in railroad operations and management.
- U.S. Black Engineer & Information Technology Magazine named Norfolk Southern among companies most supportive of historically black engineering colleges and universities. Norfolk Southern was selected based on a survey of the deans of 11 higher-education engineering programs and the Advancing Minorities' Interest in Engineering corporate academic alliance. This is the second time Norfolk Southern has been recognized.





- United Way of South Hampton Roads 2007 Community Impact Award.
- Clean Business Award presented by the Norfolk Environmental Commission for employee volunteer efforts toward site maintenance and beautification, recycling, water and energy conservation, and litter cleanup.
- 2007 Global Logistics Supplier Innovation Award presented by Eastman Chemical Company. The award recognizes Norfolk Southern for the development and implementation of a new process for delivering coal to Eastman's Kingsport, Tenn., chemical manufacturing plant. Norfolk Southern's creative redesign of its service plan for the plant resulted in significant improvements in delivery schedules, consistency of operations, and efficiency for both Eastman and Norfolk Southern.
- Toyota Logistics Services' 2007 President's Award for overall logistics excellence among rail carriers, Toyota's highest award given to a logistics provider.
- Toyota's Logistics Excellence Award for On-Time Performance among rail carriers. Norfolk Southern has won the award seven times.
- Tom Reese, national account manager intermodal, was the recipient of one of Target Corp.'s "All Star" Awards at the annual Target Carrier Conference.
- UPS recognized Norfolk Southern for its commitment and dedication to providing consistent and reliable service throughout our network in 2007.

- Triple Crown Services Company, part of Norfolk Southern's intermodal network, was named the nation's 2007 top Rail/Intermodal Transportation Service Provider in Logistics Management magazine's 23rd annual "Quest for Quality" survey of transportation professionals. The distinction marks the sixth time in the past seven years that Triple Crown was voted the nation's top provider in the rail/intermodal category.

## *Norfolk Southern Receives 2007 TRANSCAER® National Achievement Award*

Norfolk Southern received TRANSCAER's National Achievement Award for 2007 for its dedication to safe hazardous material handling. The award recognizes extraordinary achievement in support of the TRANSCAER initiative that extends beyond the geographic boundaries of any one region.



**TRANSCAER** — Transportation Community Awareness and Emergency Response—is the voluntary, nationwide outreach effort that helps communities prepare for and respond to possible hazardous material transportation incidents. Volunteers represent chemical producers, distributors, carriers, first responders, and government agencies.

Norfolk Southern was recognized for organizing and assisting with multiple events that trained more than 5,000 emergency responders. A total of 196 training classes and drills were held during 120 events, totaling more than 23,000 man-hours of instruction. The company also distributed its Railroad Emergency Response Guide at all training sessions.

Norfolk Southern has sponsored TRANSCAER Whistle Stop tours for the past eight years. The special train brings hands-on hazardous material handling classes and demonstrations to local emergency responders.

In 2007, Chuck Wehrmeister, Norfolk Southern vice president safety and environmental, received TRANSCAER's Chairman's Award for his leadership.

TRANSCAER is sponsored by the American Chemistry Council, Association of American Railroads, Chemical Educational Foundation, CHEMTREC®, The Chlorine Institute Inc., and National Tank Truck Carriers Inc. For more information on TRANSCAER, visit [www.TRANSCAER.org](http://www.TRANSCAER.org).

## *Strengthening Ties by Volunteering*

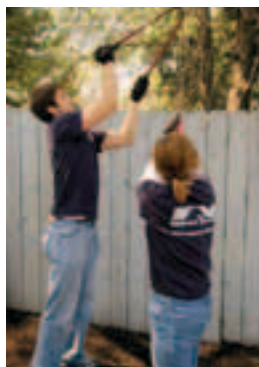
On a Saturday morning, Norfolk Southern employee volunteers scoured the banks of the Elizabeth River in Norfolk for trash and other items as part of Clean the Bay Day. By the end of the day, they had removed 5,100 pounds of trash from the waterfront area along a local baseball park.

Another sunny Saturday morning found a small army of Norfolk Southern volunteers at ForKids, a Norfolk facility that provides homeless families with housing and comprehensive services. Armed with rakes, shovels, and paintbrushes, they spent the morning cleaning up, landscaping, and painting.

These types of efforts by the Thoroughbred Volunteers, a program that provides community service opportunities for Norfolk Southern employees, led to a Clean Business Award for Norfolk Southern. Volunteer efforts toward site maintenance and beautification, recycling, water and energy conservation, and litter cleanup were deemed worthy of recognition by the Norfolk Environmental Commission.

The mission of the Thoroughbred Volunteers program is to strengthen ties between Norfolk Southern and the communities where its employees live and work by fostering employee community service volunteer activities.

Many Norfolk Southern employees also support various programs devoted to wellness and disease awareness, prevention, and cure. Among them, teams of employees participated in Tour de Cure, a series of fund-raising cycling events to benefit the American Diabetes Association.





## *Making Connections Through Our Speakers Bureau*

It began with a simple idea to have employees tell the Norfolk Southern story. Today, the 80 employees who make up the Thoroughbred Speakers Network are connecting with communities across the country.

The Thoroughbred Speakers Network, Norfolk Southern's employee speakers bureau, was formed to enhance communication with everyday people who are active in their communities. Supervisors nominated outstanding employees who volunteered to represent Norfolk Southern in the program.

The speakers bureau works to rekindle community connections that existed when railroad companies had a station agent in virtually every town. It was easy for a community to identify with the railroad.

The speakers explain how Norfolk Southern's environmentally friendly, safe, and reliable rail freight transportation system contributes to local and national economies. Many audience members are unaware that Norfolk Southern helps provide everyday essentials, such as cars, merchandise, or coal to fuel electricity.



In addition to Norfolk Southern's impact on the community, groups have learned about the company's highly praised response to natural disasters such as Hurricane Katrina.



*Norfolk Southern  
Foundation Grants  
Millions to Charities  
Through philanthropic  
investment in environmental,  
educational, and cultural  
resources in the areas the  
railroad serves, the Norfolk  
Southern  
Foundation  
helps ensure:*



- Our communities can provide residential and work environments that are safe, attractive, and desirable;
- Our region's children are provided with first-class educational opportunities that make them productive and valued employees in the future; and,
- Our communities can offer their citizens access to cultural opportunities that make life more enjoyable.

**The Foundation's  
2007 awards:**

United Way  
73 organizations  
**\$1,002,000**

Other Community  
Relations  
35 organizations  
**\$201,100**

Education  
50 organizations  
**\$895,190**

Arts and Culture  
47 organizations  
**\$1,057,804**

Civic and Community,  
including  
Environmental  
51 organizations  
**\$226,382**

Miscellaneous Other  
4 organizations  
**\$50,000**

Matching Gifts  
1,589 organizations  
**\$1,482,206**

As a major employer in both large and small communities throughout the eastern United States, Norfolk Southern takes seriously its role as a corporate citizen and its responsibility to commit resources, both human and financial, to the improvement of those communities for the benefit of our employees and our neighbors.

The Norfolk Southern Foundation awarded grants worth \$4.92 million in 2007 and plans to award grants worth approximately \$5 million in 2008 to charitable organizations supporting cultural, educational, and environmental initiatives.

For 2008, the Norfolk Southern Foundation anticipates awarding approximately \$5 million to charitable organizations as follows: \$1.02 million for 71 United Ways in communities served by Norfolk Southern; \$935,000 for arts and culture; \$880,000 for education, including \$261,000 designated for the College Partnership Program that supports Norfolk Southern's recruiting program; \$1.5 million for Matching Gifts; and the balance for civic, community relations, and environmental organizations.



The \$5 million total includes approximately \$550,000 in new discretionary funding pledged to more than 35 organizations located within Norfolk Southern's operating territory.

## *Helping Communities Recover From Natural Disasters*



While hurricanes, floods, snow, ice, fog, or extreme temperatures present operational challenges for Norfolk Southern, sometimes the effect on local communities served by the railroad is devastating. Over the years, Norfolk Southern has been a dependable partner in helping communities recover from natural disasters.

### 2005-2006

After Hurricane Katrina washed out five miles of Norfolk Southern's 5.8-mile bridge across Lake Pontchartrain in August 2005, railroad crews did the near-impossible. They pulled the track from the lake bed, rebuilt the bridge, and reinstated freight rail service in just 16 days, enabling much-needed supplies and materials to move in and out of New Orleans. In 2005 and 2006, Norfolk Southern provided financial support for community recovery efforts. Along its lines in Louisiana, Alabama, and Mississippi, Norfolk Southern contributed directly to local and state emergency responders and other community organizations, and matched employee donations to designated national relief organizations.

### 2004

Following the devastating December tsunami in Southeast Asia, Norfolk Southern provided special funds matching dollar per dollar employee contributions to designated relief organizations.



### 2001

To aid families displaced by flooding, Norfolk Southern donated flat land in southern West Virginia.

### 1999

Norfolk Southern supported relief efforts after Hurricane Floyd visited the East Coast.

### 1993

Norfolk Southern donated transportation to assist victims of the "Great Flood of '93."

### 1992

Norfolk Southern carried relief supplies originating in 13 states to victims of Hurricane Andrew.

### 1989

Norfolk Southern moved supplies for victims of Hurricane Hugo.

### 1986

Norfolk Southern helped farmers in the drought-stricken Southeast with free movement of hay to 150 destinations in seven states.

# Our People Making A Difference



## *Jim Mathews: Passion to Make Things Better*

Two years ago, Jim Mathews could not have foreseen the magnitude of what he was getting into. Today, his dedication to making things better is making a difference at 600 Norfolk Southern facilities.

Jim is a team leader in strategic sourcing, a section of the material management department. What began in 2006 as an overview by his team of how the company's communications and

signals department could improve costs led to something much bigger and brighter—a system-wide upgrade of lighting now in progress that produces an unlikely combination of benefits. It reduces energy consumption while increasing light in the company's offices, shops, and yards.

"It is making a real difference in our working environment," Jim says.

"It means a lot to our people to be able to work in white light as compared to yellow light. You can actually see things better."

At the same time, the new lighting technology is projected to reduce energy consumption by 50 million kilowatt-hours annually and result in significant emissions reductions.

"It's a win-win," Jim says. "My passion comes from the fact that the process worked. In strategic sourcing, the drive in most of our projects is to determine how we can work across departments to come up with a better way of doing things and to increase efficiencies.

"The lighting upgrade project is a perfect example. When we started our project with a review of the communications and signals area, we weren't necessarily looking for energy savings. I didn't know it was going to lead to this. But our team came to the realization that centralizing our system lighting upgrades would be a great way to make things better for our employees, to make things better for our shareholders, and to make things better for the environment."

*Overview: Norfolk Southern's people support and practice sustainability efforts in the workplace, in their homes, and in their communities. Here are the stories of some who are making a difference.*



Jim's team included Rich Gulley, manager energy services in the company's real estate department, and Cyndi Croft, manager service contracts in the material management department. Rich, who had been involved in an earlier effort to monitor and manage company energy expenses, was asked to join Jim's team after it became apparent that communications and signals had energy-related expenses across the system. "Both Rich and one of our purchasing managers indicated that we needed to look at upgrading our lighting, so we began to dig deep," Jim said.

The idea of centralizing system management of lighting expenses was a departure for Norfolk Southern. Historically, every shop and building manager included upgrade expenses in their operating budgets. The team got the go-ahead it needed with the backing of another corporate group looking into ways to reduce Norfolk Southern's operating ratio, a key measure of railroad operating efficiency.

The team decided to start with a pilot project at one location. "Rich, Cyndi, and I began to put together a project scope and bid package to cover our initial area, the Roanoke region," Jim said. "We solicited bids from about a dozen companies. After a financial analysis of the proposals, the decision was made to extend the contract with Sylvania Lighting Services from Roanoke to the entire system. Last fall, we inked the contract with them to complete the roughly \$10 million of work across our network within two years." Work started in December 2007.

Jim points to the shops at Bellevue, Ohio, to illustrate how the lighting upgrade is working. Foot-candle readings in the shop have increased from a range of 16-18 before the lighting conversion to a range of 28-30. "That's pretty impressive when you consider that the power consumption will have dropped by at least half in the process. The working conditions for the employees improved, and Norfolk Southern is saving money at the same time."

Jim also points out that for the past eight years or so, Bellevue has been involved in recycling fluorescent tubes. A recycling machine crushes them in a contained environment. No trace elements escape as up to 500 bulbs per hour are crushed and captured in a barrel. These are then shipped to a facility where the mercury is recycled and the remainder of the waste is discarded. "This is another example of how Norfolk Southern has practiced sustainability efforts for quite a while," Jim says.

While the lighting upgrade continues, Jim is on to his next big sustainability project – improving the management and efficiency of the company's vehicle fleet.

### *Lighting Upgrade At A Glance:*

- Project scope – approximately \$10 million over 24 months
- Anticipated payback – approximately 2.5 years
- Anticipated annual energy reduction – 50 million kilowatt-hours
- Anticipated annual emission reductions –
  - Carbon Dioxide – 76 million pounds
  - Nitrogen Oxide – 105,150 pounds
  - Sulfur Dioxide – 271,800 pounds



## *Matt Sommer: Taking Initiative for Sustainability*

A question led to another question that led Matt Sommer to organize a group of employees in his department to promote sustainability initiatives.

Matt, an associate designer in the information technology department, recalls asking during a meeting, "What have we done, and what are we doing in IT to support sustainability?" The response: "Why? You interested?"

That was all the motivation Matt needed. "I started organizing and getting people on track," he said. "People really wanted to get involved. It's been exciting for me to see everyone get behind it."

The IT sustainability committee counts more than 50 volunteers among its ranks. They're all IT employees, mostly in Atlanta, and several in Norfolk and Roanoke. Matt says up to a dozen and a half people serve on one of three subcommittees – one for recycling, one for employee programs, and one for power conservation.

The recycling group is in a research phase, Matt says, to identify and measure the benefits of potential recycling initiatives. An obvious target is paper, and the group is looking into greater use of paper recycling bins. The subcommittee also is looking into cost benefits and methods of reducing paper usage. One idea is to determine feasibility of setting company printers to print duplex by default. Beyond the research phase into implementation is installation of projectors in IT meeting rooms in Atlanta and Roanoke "to discourage the distribution of large amounts of printed materials during meetings," Matt says.

Coincidentally, a "Think Green, Don't Print" logo now is attached to e-mails of a growing number of Norfolk Southern employees systemwide. The logo was the idea of an IT manager, Mary Jane Boylan. "My suggestion was can you come up with something that has a train in it. I'm thrilled with it," she says of the design, created by Frank Wright, manager design resources in the company's corporate communications department. "It really makes you think," Mary Jane says: "Do I really need to print this?"





The employee programs group is working to build sustainability awareness among IT employees by communicating and educating. Efforts include supporting use of a Web-based data collaboration tool, SharePoint, which IT is piloting. SharePoint is a Microsoft product that can be used for document management and employee calendars.

### *Other initiatives the group is studying:*

- A distinctive logo for the IT sustainability committee, which it calls “Conserve IT”
- A bicycle rack at Roanoke to make it easier for employees to cycle to and from work
- A bike sharing program at Atlanta whereby employees could use pedal power for running short errands during lunch breaks
- Giving out reusable mugs to cut down on the use of Styrofoam cups to save costs and reduce waste deposited in landfills

The power conservation group is examining methods for reducing energy use in the company’s data center. It is monitoring temperature, air flows, and cooling systems to identify potential cost reductions. The group also is exploring whether solar power might be applicable to some of its operations. Finally, it is considering whether company computers should be set to maximize use of power save mode and to encourage employees to shut down laptops at night or put them in sleep mode.

Blair Wimbush, Norfolk Southern’s corporate sustainability officer, cites the employee involvement and commitment of the “Conserve IT” group. “They can be a model for other Norfolk Southern people in how to be engaged in the company’s sustainability efforts,” he said.

Matt says sustainability efforts in the workplace are natural “for people who try to conserve at home in their daily lives. They’ve been real positive about it. This initiative hopefully will get some other departments and divisions started on their own.”

The IT group has cheered on, Matt says, an effort by the company’s facilities management team to install waterless urinals in the Atlanta office building. He says each one pays for itself in just under a year, and facilities management estimates water savings of some 800,000 gallons annually.





## *Don Usak: Sustained Effort Earns Industry Recognition*

When it comes to working to reduce locomotive emissions, Don Usak is no Johnny-come-lately.

Don, manager locomotive engineering, has dedicated his efforts to that mission for more than 15 years. He has been instrumental in installing auxiliary power units in nearly 600 locomotives, eliminating the need for locomotives to idle even at subzero

temperatures. This has saved the railroad about 4 million gallons of fuel annually.

Don also is responsible for adding automatic engine stop-start systems to specifications for new locomotives, and he has led efforts to retrofit existing locomotives with this idle reduction technology. The result is reduced fuel consumption and air emissions.

As chairman of the Association of American Railroads' Locomotive Committee, Don has shared his ideas on reducing locomotive idling with locomotive builders, suppliers, and other railroads. As a result, the AAR issued a comprehensive document specifying how idle reduction systems will work. A subcommittee is now working as the Idle Reduction Team to assess additional ways to save fuel and reduce pollution through use of this technology.

In recognition of his efforts, Don was Norfolk Southern's nominee for the railroad industry's top environmental award, the John H. Chafee Environmental Excellence Award. The award is named after the late Sen. John H. Chafee of Rhode Island, a strong environmentalist who understood and promoted the environmental advantages of rail transportation.

A 34-year Norfolk Southern employee, Don has championed technology and methods to reduce locomotive emissions since the 1990s. He takes an active role to help ensure Norfolk Southern's compliance with emissions regulations. His knowledge of locomotive emissions helps him safeguard Norfolk Southern and the railroad industry against potentially harmful exposures. Don routinely discusses compliance issues with mechanical department staff members at Norfolk Southern. He has educated management and shop craft employees about environmental regulations.

As locomotive builders introduced idle reduction technology, Don took an active role in ensuring that Norfolk Southern was a benefactor of these advancements. Evaluating data collected from prototype units, Don positioned Norfolk Southern as an industry leader by adding "Automatic Engine Stop Start" systems to the Norfolk Southern specification for new locomotives. He then quickly initiated capital budget requests to retrofit existing locomotives with idle reduction systems. Today, approximately 1,700 locomotives in the Norfolk Southern fleet are equipped with this emissions-saving technology. Since locomotives supplied to Canada and Mexico will be built to these standards, these important changes will impact air quality throughout North America for decades to come.

Beyond railroading, Don's lifelong interest in wildlife has led him to membership and participation in multiple conservation organizations. These include the Rocky Mountain Elk Foundation, the Foundation for North American Wild Sheep, and Safari Club International.





## *FORWARD-LOOKING STATEMENTS*

This Sustainability Report contains forward-looking statements that may be identified by the use of words like “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.



