

# 2014 Sustainability and Citizenship Report



# About the Report

Union Pacific's mission of service defines us and drives our commitment to safely transport products across the country, provide good jobs, operate ethically and invest in our country by investing in our communities.

This report details our progress in four key areas during 2014: operating safely, strengthening communities, engaging employees and working to preserve the environment. We also summarize our financial performance and economic impact.

We used the <u>Global Reporting Initiative's G4 Guidelines</u> to inform reporting on our most material sustainability and citizenship issues. This publication focuses on initiatives and accomplishments from the 2014 calendar year and includes 2014 data, unless otherwise noted.

# Table of Contents

Our Company	 3
Letter to Stakeholders	 3
Key Performance Indicators	 4
Sustainability and Citizenship Goals	 5
Zeroing in on Safety	 5
Fuel Consumption Rate and	
GHG Emissions Goal	 5
Stakeholder Outreach	 6
About Union Pacific	 7
Diversified Business Products	 8
Governance and Ethics	 9
Key Awards and Recognition	 9
Economic Impact	 10
Delivering Value to Our Customers	10

Delivering Value to Our Customers10
Financial Performance
Indirect Economic Impacts

<b>Operating Safely</b>
Public Safety
Employee Safety
Technology's Role in Employee Safety15 $$
Hazardous Materials and
Chemical Risk Reductions
Crude-by-Rail
AskRail Response Tool
Issue in Focus: Derailments
Key Awards and Recognition
Strengthening Communities 20
State-by-State Economic Impact 21
$Providing \ Good \ Jobs \ . \ . \ . \ . \ . \ . \ 22$
Connecting with Communities 23
Enhancing America's Rail Infrastructure . 25
Supply Chain
Key Awards and Recognition

Engaging Employees
Benefits
Labor Agreements
Offering a Path to Wellness
Employee Resource Groups 30
Auxiliary Work and Training Status 30
Training and Career Development 31
Key Awards and Recognition 32
Preserving the Environment 33
Addressing Climate Risk
Environmental Management
Greenhouse Gas Emissions
Increasing Fuel Efficiency
Collaborative Opportunities
Waste Management
Water
Union Pacific and the Land 40
Compliance
Key Awards and Recognition 40
Looking Ahead

### Letter to Stakeholders



Our vision – Building America – is rooted in our relationships with and responsibilities to citizens nationwide. We recognize the interests of our neighbors are unique to the diverse communities where they reside.

Spurred by our mission of service, our focus is on helping communities thrive, while evolving to meet the nation's dynamic and growing freight transportation needs. Sustainable business practices are integral to this performance.

Union Pacific enjoyed a strong year in 2014, coinciding with the U.S. economy's moderate march forward. We handled robust 7 percent volume growth in 2014, driven in part by a record grain harvest and increased frac sand, lumber and domestic intermodal shipments. Our automotive and coal businesses saw modest volume gains over 2013, while our chemicals business was up slightly, as growth in base chemicals more than offset a decline in crude-by-rail shipments. Union Pacific is well-positioned to provide logistics for a wide variety of business segments, and last year demonstrated the value of our unique and diverse franchise.

Although we finished the year strong, we were reminded that external factors can impact our operations as significant weather disruptions challenged our network's performance. This drives home the importance of investing for the future.

Union Pacific spends more on its infrastructure than 43 state highway agencies. Last year, our capital program totaled \$4.1 billion, strengthening U.S. infrastructure, spending a significant portion with U.S.-based suppliers and creating jobs for U.S. workers.

We are proud of how we leveraged resources to enable a more resilient operation, while being agile to accommodate changing market conditions. At the same time, we remained committed to our four key sustainability and citizenship pillars: Operating Safely, Strengthening Communities, Engaging Employees and Preserving the Environment, on which we report in individual sections. For example:

- The team made progress toward achieving our ultimate goal of an incident-free railroad. We achieved a record-low annual reportable personal injury rate, which was an 11 percent improvement versus 2013, and our reportable derailment rate decreased by 7 percent year over year.
- As we strive to be a good neighbor in the more than 7,300 communities where we work and our families reside, Union Pacific collaborates
  with local leaders, governments and organizations. Public safety is a critical component of our community activities. Last year, we electronically
  inspected 222,000 miles of track, visually inspected 4.8 million miles of track, conducted more than 3 million signal and detection device
  inspections, and conducted 38,600 bridge inspections.
- To support companies that represent the communities with whom we do business, Union Pacific continues to build a diverse supplier base, increasing our diverse supplier spending by about 5 percent over 2013.
- How we accomplish our tasks is just as important as what we accomplish, and we shape our culture through our values of teamwork, strong performance and high ethical standards. We are focused on helping employees be their best and connect their work with our mission of service, offering a comprehensive benefits program, wellness resources, training and career development opportunities, and educational assistance.
- With ownership of 1 million acres of land, we look for opportunities to reduce operational impacts and work to ensure we can succeed as a company while at the same time protecting the environment. Our customers helped eliminate an estimated 35.8 million metric tons of greenhouse gases by choosing rail over truck transportation.

Last year had many highlights, but it was not without its challenges, which we detail in each section.

Innovation, investment and hard work have been foundational to Union Pacific's 152 years. We hope this report provides you a sense of our determination to sustain that legacy, collaborating with stakeholders to safely and responsibly transport the goods that help power America's economy.

Lance Fritz President and CEO

# Key Performance Indicators

OPERATING SAFELY	2012	2013	2014
Rail crossing accidents (per million train miles)	2.38	2.22	2.34
Reportable injury rate* (per 200,000 employee-hours)	1.06	1.10	0.98
Public outreach	About 8,500 events reached 704,000 people	About 9,000 events reached more than 616,300 people	13,580 events, reached more than 629,500 people
STRENGTHENING COMMUNITIES	2012	2013	2014
Reported net income	\$3.9 billion	\$4.4 billion	\$5.2 billion
Operating revenue	\$20.9 billion	\$22.0 billion	\$24.0 billion
<b>Capital program</b> (private funds, no taxpayer dollars)	\$3.2 billion	\$3.6 billion	\$4.1 billion
Spend with minority- and women-owned businesses	\$430 million	\$484 million	\$509 million
ENGAGING EMPLOYEES	2012	2013	2014
Percent of employees unionized	86%	86%	85%
Workforce diversity	5% Female, 95% Male 1% Asian 11% Black 74% Caucasian 12% Hispanic 2% Native American	6% Female, 94% Male 1% Asian 11% Black 74% Caucasian 12% Hispanic 2% Native American	6% Female, 94% Male 2% Asian 11% Black 73% Caucasian 12% Hispanic 2% Native American

U.S. Population 2011 census data (permits reporting of more than one race): 5% Asian, 13% Black, 78% Caucasian, 17% Hispanic, 1% Native American

PRESERVING THE ENVIRONMENT	2012	2013	2014
Energy usage	45.6 million megawatt hours	45.7 million megawatt hours	48.4 million megawatt hours
Water usage withdrawals**	2.82 billion gallons	2.24 billion gallons	2.09 billion gallons
GHG emissions			
Locomotive fossil fuel emissions (scope 1)	11,149,798 metric tons	11,153,933 metric tons	11,850,514 metric tons
Fossil fuel emissions (scopes 1 and 2)	11,940,205 metric tons	11,953,871 metric tons	12,666,733 metric tons
Employee travel (scope 3)	16,932 metric tons	18,210 metric tons	19,977 metric tons
Waste***			
Total waste generated	1.12 million tons	1.09 million tons	1.10 million tons
Tonnage diverted from landfills	76%	76%	77%
E-waste****	Approximately 405,000 pounds recycled or reused	Approximately 370,000 pounds recycled or reused	Approximately 270,000 pounds recycled or reused

\*Restated 2012/2013 to reflect previous employee-hour miscalculations \*\*Restated 2013 to remove Metra data

\*\*\*Restated 2013 to include new data identified through further analysis

\*\*\*\*Restated 2012/2013 to exclude packaging

# Sustainability and Citizenship Goals

Union Pacific's values are to focus on performance, ensure high ethical standards and work as a team. Operating safely and responsibly is paramount for our success.

Broadly, our sustainability and citizenship goals include our commitment to:

- Operate a safe, efficient and environmentally responsible rail network that delivers the best customer service.
- Provide employees with the safest work environment.
- · Constantly improve employee, customer and public safety through training, education, innovation and investment.
- Develop employee programs and processes that make us an employer of choice.
- Invest in our network infrastructure to enhance safety, service and efficiency.
- Grow our business profitably and responsibly so we can invest in the future and make a positive impact on our employees, communities, customers and shareholders.

### Zeroing in on Safety

No injury is acceptable. That's why our ultimate goal is achieving annual safety records toward zero:

- Zero employee injuries
- Zero trespasser incidents
- Zero vehicle grade crossing accidents
- Zero train derailments



Baltazar Perez, fireman and oiler

# Fuel Consumption Rate and GHG Emissions Goal

Our goal is to reduce Union Pacific's locomotive fuel consumption rate by 1 percent each year from 2015 to 2017. Measured on a gross ton mile basis, this will result in a greenhouse gas emissions reduction of 1 percent annually.

Our <u>Preserving the Environment</u> section features information about steps we are taking to improve our fuel efficiency.

# Stakeholder Outreach

Union Pacific interacts with many different groups in the communities where we operate, and we take into account their range of perspectives in setting citizenship and sustainability priorities.

These include:

- Advocacy groups
- Communities
- Customers
- Employees
- Investors
- Policy makers and regulators
- Suppliers

### COMMUNICATION CHANNELS

#### Communities

- Employee volunteers
- Union Pacific Foundation communitybased grants
- <u>UP CARES</u> (Crossing Accident Reduction and Education Safety program)
- Employee and corporate giving
- Nationwide 24-hour emergency hotline: 888-877-7267
- Safety training for fire and law enforcement personnel
- Union Pacific and communities joint emergency response committees
- Employee recruiting
- State-specific <u>public affairs contacts</u> and outreach
- Public-private partnerships
- Facebook, LinkedIn, Twitter, YouTube and other social media channels
- <u>Community Ties</u>
- Event sponsorships
- <u>News releases</u>
- <u>RSS feed</u>

#### Customers

- Union Pacific account representatives
- National Customer Service Center
- Customer satisfaction surveys
- Web portal
- Advertising and marketing

- Electronic commerce capabilities
- Industry-specific customer education seminars
- <u>Customer news and service updates</u>
- Events and trade shows
- Partnerships and memberships
- Supply chain impact evaluation for customers
- Pinnacle Awards for chemicals customers
- Innovative customer partnerships, including TRANSCAER
- <u>Carbon Emission Estimator</u>
- News releases
- RSS feed

#### **Employees and Retirees**

- UPOnline daily news updates
- Employee website
- Employee ethics hotline
- Business ethics bulletins
- Inside Track employee magazine
- Union Pacific Information Television
- Senior management field visits and town halls
- Senior management online town halls
- Craft-specific and regional
   employee newsletters
- Labor Relations Connection, an online portal for union employees
- <u>Retirees and families website</u>
- <u>UP Voices</u> grassroots network
- Employee Resource Groups
- Safety policies, training and certification programs
- Education assistance and management training
- Friend to Friend employee network
- Performance management
- Surveys and focus groups
- Leadership meetings
- Recognition programs
- Employee clubs
- Peer Support
- CEO letters
- Family days
- Company calendars

#### Investors

- <u>Annual reports and proxy statements</u>
- Investor conferences
- Shareholder meetings with management
- Earnings conference calls
- <u>SEC filings</u>
- <u>Quarterly earnings reports</u>
- Email alerts
- Website FAQ
- <u>Annual Fact Book</u>

#### **Regulatory Officials**

- Union Pacific <u>Environmental</u> <u>Management Program</u>
- Ongoing dialogue via our <u>Washington</u>, <u>D.C.-based staff</u>
- Participation in the Association of American Railroads
- Commitment to meet voluntary agreements with the California Air Resources Board and other states
- Collaboration with U.S. Customs and Border Protection
- Employee and corporate regulatory and legislative advocacy
- Voluntary participation in initiatives, including the U.S. Environmental Protection Agency's SmartWay Transport Partnership
- News releases
- RSS feed

#### Suppliers

- Competitive bid process
- Electronic commerce capabilities
- Supplier diversity program
- Supplier Code of Conduct
- Supplier performance tracking system
- Supplier quality program
- Website FAQ

### About Union Pacific



Union Pacific is a member of several national industry and business organizations, including:

- American Wind Energy Association
- Association of American Railroads
- Food Shippers of America
- Global Environmental Management Initiative
- GoRail
- National Association of Manufacturers
- National Business Group on Health
- National Freight Transportation Association
- National Grain and Feed Association
- National Minority Supplier
   Development Council
- National Safety Council
- United States-Mexico Chamber of Commerce
- U.S. Chamber of Commerce

Union Pacific Railroad is the principal operating company of Union Pacific Corporation (NYSE: UNP). One of America's most recognized companies, Union Pacific Railroad connects 23 states in the western two-thirds of the country by rail, providing a critical link in the global supply chain.

From 2005 to 2014, Union Pacific invested more than \$31 billion in its network and operations to support America's transportation infrastructure. The railroad's diversified business mix includes agricultural products, automotive, chemicals, coal, industrial products and intermodal freight. Union Pacific serves many of the fastest-growing U.S. population centers, operates from all major West Coast and Gulf Coast ports to eastern gateways, connects with Canada's rail systems and is the only railroad serving all six major Mexico gateways. Union Pacific provides value to its roughly 10,000 customers by delivering products in a safe, reliable, fuel-efficient and environmentally responsible manner.

For more than 150 years, Union Pacific has been dedicated to customer service, investment and innovation. We proudly maintain our legacy by providing quality jobs, minimizing our environmental impact and contributing to the communities where we live and work.

# **Diversified Business Products**

Union Pacific moves the goods American families and businesses use every day. Just about everything in homes, offices, manufacturing facilities, construction sites and stores moves by train at some point.

#### Agricultural Products | Revenue: \$3.8 billion

We haul the products that feed the nation and many parts of the world, efficiently delivering whole grains and other agricultural goods.

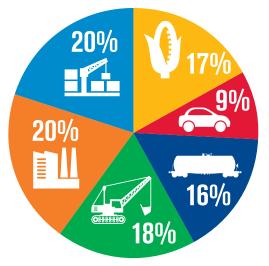
#### Automotive | Revenue: \$2.1 billion

Union Pacific provides transportation and logistics for automotive parts, finished vehicles and aftermarket vehicles. We directly serve five vehicle assembly plants, distribute imported vehicles from the West Coast and Gulf of Mexico, and operate or access distribution centers for all major automotive manufacturers.

#### Chemicals | Revenue: \$3.7 billion

Union Pacific carries the chemicals used to clean drinking water, produce plastics and fertilize our crops. We also transport petrochemicals, crude oil extracted from U.S. shale locations and soda ash.

### 2014 FREIGHT REVENUE



#### Coal | Revenue: \$4.1 billion

Coal generates more than one-third of the U.S. electricity supply, and we deliver more than 20 percent of the coal America needs.

#### Industrial Products | Revenue: \$4.4 billion

Union Pacific ships a variety of raw materials and finished goods, including steel, pipe, frac sand, cement, military equipment, wind turbine components and lumber.

#### Intermodal | Revenue: \$4.5 billion

Intermodal involves transporting freight in an intermodal container or vehicle using multiple modes of transportation (rail, ship and truck). This method reduces cargo handling and improves security and efficiency. One Union Pacific intermodal train can take several hundred trucks off America's congested highways. We deliver a wide range of multimodal solutions for domestic and international freight shippers moving products such as electronics, toys, furniture, clothing and auto parts.

#### Mexico Markets

Union Pacific is the leading freight transportation services provider to and from the United States/Mexico border and is the only railroad to serve all six major Mexico gateways. Revenue from our six business units includes \$2.3 billion from Mexico in 2014.



Thomas Price, manager-special projects

### Governance and Ethics

Our commitment to ethics begins with our board of directors and is maintained through every level of our organization. We work diligently to maintain the highest standards and to provide quality service and value to our customers, investors and employees.

Union Pacific employees are trained on our <u>Statement of Policy on</u> <u>Ethics and Business Conduct</u>. This includes our security personnel and commissioned police force, who keep our facilities secure and prevent unauthorized access.

The policy's purpose is to convey the basic principles of ethical business conduct expected of all employees. As a foundation, the principles are grounded in compliance with all applicable laws and rules, and observe the highest ethical standards, including honesty, fairness, integrity and respect.

To learn more, including relevant policies and procedures as well as information on our board of directors, see the <u>Corporate Governance</u> <u>section</u> of the Union Pacific website.

### Key Awards and Recognition

- Forbes' America's Most Reputable Companies List
- Barron's 'World's Most Respected' Companies List
- Fortune's Most Admired in Industry List
- David Black Earns Maverick PAC's Future 40 Award
- FTSE4Good Index series constituent

# Delivering Value to Our Customers

We help our customers' goods reach their destinations safely, efficiently and effectively. Part of delivering on that is maintaining open lines of communication.

Customers have multiple means of communicating directly with Union Pacific, including our National Customer Service Center and sales professionals. These one-on-one conversations ensure individual concerns can be appropriately handled.

Customers access to various automated tools through our online, secure MyUPRR portal. Customers use this site to trace and release equipment, report and revise service issues, and subscribe to automated railroad updates.

Through the subscription service, customers receive emails containing critical news such as service interruptions, pricing changes, embargoes, holiday operating plans, weather events and general service updates.

We measure customer engagement through our ongoing Customer Satisfaction Survey. By actively seeking feedback from customers, we are able to understand and address customer concerns.

# **Financial Performance**

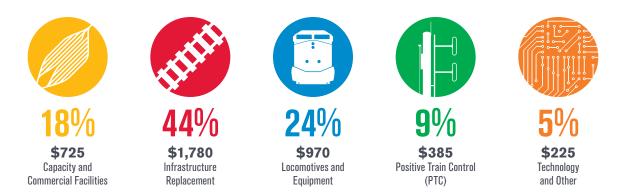
For the full year 2014, Union Pacific reported net income of \$5.2 billion or \$5.75 per diluted share. This compares to \$4.4 billion, or \$4.71 per diluted share, in 2013, 18 and 22 percent increases, respectively. Operating revenue totaled a record \$24.0 billion versus \$22.0 billion in 2013. Operating income totaled \$8.8 billion, an 18 percent increase over 2013.

#### INVESTING IN THE FUTURE

Capital is critical to strengthening Union Pacific's operations. As a company that has been around for more than 150 years, we know that investing for the future is important to ensuring the long-term success of Union Pacific as a strong and competitive company. In 2014, we invested \$4.1 billion to renew system infrastructure and support growth. This helps ensure our railroad and heritage live on for another 150 years. Some key investments we made included:

- 261 new locomotives
- 880 miles of rail more than twice the length of Kansas
- Terminal and facility upgrades
- Completion of the Santa Teresa intermodal and fueling facility in New Mexico

#### \$4.1 BILLION CAPITAL\* In Millions



\*Includes cash capital, leases and other non-cash capital (excludes buyout of lease on Headquarters building)

# Indirect Economic Impacts

#### Union Pacific's Role in America's Energy Renaissance

In today's evolving landscape, the world's energy needs are being met through a diverse portfolio of traditional and non-traditional sources. Union Pacific works to ensure uninterrupted energy delivery to help foster a strong, stable and resilient economy.

According to the International Energy Agency, the United States may soon pass Russia and Saudi Arabia as the world's top oil producer. This production has helped support an energy renaissance that is creating jobs and lowering costs for consumers at the pump. Union Pacific, along with other U.S. and Canadian railroads, is playing a significant role in helping this revival.

Throughout its history, Union Pacific has been a critical part of the energy infrastructure, hauling commodities including coal, ethanol, wind turbines and solar panels. With the increase in crude production, railroads offer the safest mode of land transportation for hazardous materials, delivering it safely 99.997 percent of the time, according to the Association of American Railroads.

#### FORGET DISNEYLAND: I'M GOING TO SANTA TERESA

A year after Union Pacific's intermodal terminal and locomotive fueling facility officially opened in April 2014, Santa Teresa has become one of the state's hottest industrial areas, building upon the momentum that began when the railroad started planning the new facility years earlier.

Jerry Pacheco, who operates the Border Industrial Association (BIA), which represents the industrial base from Santa Teresa to Las Cruces, New Mexico, calls it the "<u>Disneyland Effect</u>."

"Think about all the businesses that popped up around Disneyland," he said. "The curio stores, the T-shirt shops, the gas stations – they're not associated with Disneyland, but they want to be there because it's an attractive place to be."

When it comes to Santa Teresa, there are two Disneylands. One is the Union Pacific facility; the other is computer maker Foxconn, whose factory sits on the other side of the Mexican border just a few miles away.

"We're sandwiched between these industrial zones, between these two projects that have attracted international attention," Pacheco said. "If your company is here, you get superior logistics. You have the capability of doing business on the other side of the border. There's no better place to be, and that's the Disneyland concept."

To prove his point, Pacheco rattled off a list of companies that have either been established or grown since Union Pacific announced its Santa Teresa facility, including:

- Twin Cities Services, a container hauler and storage company
- Transmaritime Inc., a transloader and warehouse facility
- ERO Intermodal Services, a company that maintains and repairs truck chassis and containers that also supplies parts for heavy equipment
- The Santa Teresa Southern Railroad, a private railroad that connects businesses with Union Pacifc's main line
- Stagecoach Cartage and Distributing, a 10-acre transload, warehousing and drop yard

- W Silver Recycling, which will use rail to transport recycled metals,
- CN Wire Corporation, which opened a 258,000-square-foot facility that employs 300

And, of course, Penny's Diner and the Oak Tree Inn, which sits in the center of the industrial park. "We've got everything from warehousing to logistics and manufacturing," Pacheco said, "all located within seven or eight miles of the Union Pacific facility."

He said Santa Teresa boasts more than 3.3 million square feet of industrial space, but a year after Union Pacific moved its container business from east El Paso to the new Santa Teresa facility, only 8,000 square feet remained available.

"Union Pacific gave us the opportunity not only to recruit existing businesses that came from El Paso, it allowed us to bring in new regional business," Pacheco said. "We've got a little over 3,000 people working in these parks. Not too long ago, that number was between 1,200 and 1,500, so we've more than doubled the jobs."

Even more dramatic changes could be on their way with the creation of the Westpark Logistics Center, a 166-acre development christened just last month. One of the largest industrial parks in New Mexico – and the closest to Union Pacific's intermodal facility – Westpark's first tenant will be MCS Industries, a U.S. picture frame manufacturer.

"Companies ask me, 'What's my investment going to be worth in 10 years?" Pacheco said. "Well, it's going to be worth quite a bit because this is a hot place, and if you buy in early and you build your plant here, you're going to be in a sweet, sweet position. The value's not going to go down, and we have so much room around Union Pacific, there's still plenty of time to come in and set up your plant."

Attracting more business to rail also offers environmental benefits. According to the U.S. Environmental Protection Agency, freight trains are nearly four times more fuel efficient than trucks.

2014 Sustainability and Citizenship Report **OPERATING SAFELY** 



Christian Lozano, manager-yard operations

# **Operating Safely**

Safety is Union Pacific's No. 1 priority. Nothing is more important than the well-being and security of our employees and the people who reside in the communities where we live and operate. Safe operations also are critical to meeting our customer commitments. We invest significant resources in training employees, developing innovative technologies and increasing railway safety awareness. Our ultimate goal is to achieve annual safety records on our way to zero incidents, building a safer America.

#### **HIGHLIGHTS, CHALLENGES AND OPPORTUNITIES**

In 2014, Union Pacific made strides in operating safely and preventing accidents. Through our signature UP CARES public safety initiative, we continued a multi-media, bilingual public awareness campaign that educated drivers and pedestrians in various cities in Texas, Louisiana, Arkansas, California, Minnesota and Illinois about safety around railway crossings.

Union Pacific is on the cutting edge of developing technologies to improve railway safety. See this report's <u>Technology in Safety</u> section for examples. We believe that continued investment such as our \$4.1 billion 2014 capital program and future expenditures give us the opportunity to cement our status as a leading innovator in this area.

Although derailments decreased by 7 percent from 2013 to 2014, achieving our goal of completely eliminating accidents on our railways will require further hard work.

# Public Safety

### **UP CARES**

Union Pacific's public safety program is <u>UP CARES</u>, the Union Pacific Crossing Accident Reduction Education and Safety initiative. Through UP CARES, we host events across our 23-state network to educate pedestrians, motorists and truck drivers about how to stay safe around railroads and grade crossings. In 2014, we held 13,580 events, reaching more than 629,500 members of the public.

### **UP CARES SAFETY GRANTS**

UP CARES awarded grants ranging from \$500 to \$5,000, providing financial support for community-owned railroad safety initiatives in towns where Union Pacific operates. Organizations and programs receiving these grants included youth education activities, school or community safety days, community safety blitzes and grade crossing educational enforcement activities.

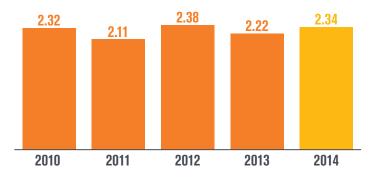
### **PUBLIC AWARENESS CAMPAIGN**

In 2014, Union Pacific continued a multi-media, bilingual public safety campaign encouraging pedestrians and drivers to act safely at railroad crossings. As part of the UP CARES initiative, the public awareness campaign used <u>radio spots</u> and billboards in English and Spanish to reach audiences in Houston, San Antonio, Laredo, Midland and Odessa, Texas; Plaquemine, Louisiana; Little Rock, Arkansas; Fresno, California; Minneapolis/St. Paul, Minnesota; and Chicago.

Each radio spot featured a Union Pacific employee sharing a key railroad safety message:

- Drivers and pedestrians should cross railroad tracks only at designated crossings.
- Never use railroad tracks as a shortcut.
- If the railroad crossing gates are down, don't go around.
- When driving a commercial truck, know its vertical clearance to avoid getting high-centered.
- When approaching a railroad crossing, ensure there is enough space in front of your vehicle to completely clear the crossing.

CROSSING ACCIDENTS Per Million Train Miles





### UNION PACIFIC TAKES ACTION TO PROTECT SPORTS FANS IN SAN ANTONIO

Union Pacific partnered with the San Antonio Spurs to keep fans safe as they traveled to and from AT&T Stadium in June 2014 for the NBA Playoffs. After our train crews noticed cars were parked too close to the tracks near the stadium, we worked with the Spurs to arrange extra security on hand to ensure motorists parked a safe distance away. Union Pacific employees also staffed a rail safety booth at games, and the Spurs played an Association of American Railroads' public service announcement, encouraging fans to "See Tracks? Think Train."

"Spurs Sports and Entertainment is proud to partner with Union Pacific Railroad to ensure our fans enjoy the game atmosphere and stay vigilant around railroad tracks. We remind everyone that when you see tracks, always expect a train," said Bobby Perez, senior vice presidentcorporate relations and general counsel for Spurs Sports and Entertainment.

# **Employee Safety**

### **PERFORMANCE OVERVIEW**

Union Pacific's 2014 annual employee safety performance was the best in company history. Employees lowered the reportable injury rate to 0.98 injuries per 200,000 employee hours – equivalent to 100 employees working a full year – breaking the previous record established in 2012. The 2014 rate represents an 11 percent reduction from the 2013 reportable rate of 1.10 and demonstrates our employees' dedication to reducing injuries and achieving the company's goal of zero injuries.

RAGE

TO

### **COURAGE TO CARE**

In 2012, Union Pacific introduced the "Courage to Care" pledge. It represents a culture of safety and personal accountability and strengthens the degree to which each and every employee prioritizes safety as an issue. The pledge reads:

I have the courage to care. Worn with a lion's pride, it means those I work with will have my back, and I will have theirs. I pledge to shield myself and my team from harm. I will take action to keep them safe by fixing an unsafe situation, addressing an unsafe behavior or stopping the line. In turn, I will have the courage to accept the same actions from my coworkers, who care enough to correct my path. We wear this badge out of respect for each other and those who have gone before us. On my watch, we will all go home safe to our families every day.

Throughout the year, we conducted systemwide safety "stand down" meetings that focused on the role Courage to Care plays in employees' lives. Normal operations are suspended so in-depth safety conversations can take place. A meeting this fall included a video, "Courage to Care: On the Way to Zero," featuring employees in Los Angeles and El Centro, California, discussing the importance of identifying risk and returning home safely to their families.

### TOTAL SAFETY CULTURE

Total Safety Culture (TSC) is a voluntary employee-led initiative that teaches employees safe behaviors while providing observations and feedback. TSC directly empowers our union employees to address at-risk behaviors and receives the full backing of senior management.

#### KENEFICK SAFETY AWARD WINNER



From left are Cameron Scott, Union Pacific executive vice president-operations; Hughes and his wife, Nikki; and Lance Fritz, Union Pacific president and CEO.

John Hughes received the 2014 J.C. Kenefick Safety Award, Union Pacific's highest safety honor. Hughes was integral to the Houston Service Unit achieving a 40 percent reduction in human factor incidents.

He inspired co-workers on the Houston Service Unit through employee engagement and training programs, creating a cohesive family that holds safety above all else.

Hughes delivered more than a good safety strategy; he helped change the way people think about safety. As a result, the service unit returned more than 60,000 Total Safety Culture (TSC) observation cards.

His team also established "intensity rides," a process to identify risk and then apply TSC to help eliminate or mitigate it; developed goal setting cards for TSC participants; created a contest among teams and managers to see which group could complete the most TSC observations; taught TSC and job briefing classes to new hires, and helped design a new-hire safety training course.

# Technology's Role in Employee Safety

### TELEMATICS

More than 2,650 company vehicles are outfitted with telematics. This technology uses a telecommunications device to transmit real-time information about motorist behavior, including seat belt use, speed, and acceleration and deceleration, to provide feedback that encourages safe driving habits. Reaffirming the practice of maintaining a steady safe speed, as opposed to rapid increases in speed or excessive braking, telematics is among ongoing efforts to improve fuel economy.

### **IN-CAB CAMERAS**

We installed our first inward-facing cab cameras in 2014. By the end of 2016, we expect to equip 5,000 locomotives with this technology.

The inward-facing cameras join the locomotive fleet's external-facing cameras, called Track Image Recorders (TIR) that have provided images of track, crossings and signals directly in front of locomotives since 2005. The video is used in conjunction with the locomotives' Event Recorder data, which includes train speed, throttle and brake settings, traction power levels and horn use.

Through the years, the TIR/Event Recorder data have validated the professionalism of train crews and the same results are expected from inward-facing cameras. Proactive performance sampling of video can increase understanding of crew behaviors, so training and coaching can be improved.

Use of video technology to ensure safety, security and situational awareness is expanding in public places, government facilities and businesses. The rail industry reflects this worldwide trend, with cameras used in yardmaster towers, tunnels, shops, office buildings, crew vans, border locations and remote control locomotive (RCL) crossings.

#### TRAINING COURSE FOR EXPERIENCED DRIVERS

For years, our Telecommunications employees have participated in a specialized course for experienced drivers that offers safety reminders and vehicle operating techniques. Based on related safety successes, this course is being deployed throughout our organization from senior leadership to all Operating Department employees who drive a company vehicle.

### SECURITY PERSONNEL

We employ state-of-the-art, 24-hour security technology to detect unauthorized access. In conjunction with our own highly trained, <u>commissioned police force</u>, Union Pacific coordinates security efforts with U.S. Customs and Border Protection (CBP), the U.S. Coast Guard, the Federal Bureau of Investigation, the Central Intelligence Agency, the Department of Homeland Security, the Transportation Security Administration and local law enforcement. Union Pacific was the first U.S. railroad to be named a partner in the Customs-Trade Partnership Against Terrorism (C-TPAT), a CBP program designed to develop, enhance and maintain security processes throughout the global supply chain.

# Hazardous Materials and Chemical Risk Reductions

We take seriously our responsibility to safely ship all freight. Our goal is the same as that of our customers and the communities in which we operate: for every car to be safely delivered, while being prepared to respond in the unlikely event of an accident.

As part of our efforts to move freight safely, Union Pacific's Environmental Management Group includes a <u>Hazardous Materials Management</u> <u>team</u> (HMM). This group of experts is highly trained in hazardous material transportation safety, securement and response. Union Pacific has met stringent certification requirements under the American Chemistry Council's Responsible Care Management System (RCMS) program, demonstrating for the public and chemical customers our commitment to safely handling hazardous materials. The HMM team has a four-part mission: prevention, preparedness, response and recovery.



**Prevention** – Union Pacific's HMM managers regularly inspect tank cars moving on our network, conducting 6,000 customer tank car security and safety inspections annually. In each inspection, an HMM team member examines fittings, markings, safety appliances and waybills. HMM conducts tank car inspection blitz programs where Union Pacific managers, outside contractors, customers and regulators work together to inspect a large number of tank cars in a defined geographic area. We choose high-volume locations and perform around a dozen blitzes annually across the Union Pacific network.

**Preparedness** – Preparation is critical to responding appropriately to incidents. HMM developed the Union Pacific Hazardous Materials Emergency Response Plan (HMERP), a performance-based plan that provides guidance about reporting a release, as well as a list of training requirements for those responding to an incident. Each of Union Pacific's operating divisions undergoes an annual, unannounced drill to ensure all aspects of the HMERP are in place and are being followed by employees. Additionally, we offer no-cost training to public responders, including local fire departments, so they are able to effectively respond to incidents along the Union Pacific network should the need arise. HMM also performs large-scale training events in collaboration with Union Pacific's partners in TRANSCAER (Transportation Community Awareness and Emergency Response).

**Response** – When responding to any incident, it is important to follow a defined and carefully laid-out process. HMM's process is designed to be easily incorporated into the public response incident command structure. Union Pacific's Response Management Communication Center (RMCC) is an around-the-clock response center where dispatchers manage calls from the public, law enforcement and others who are reporting emergencies and other incidents on Union Pacific's 32,000-mile network. RMCC follows all regulations regarding notification of local, state and federal agencies about accidents, and the company works closely with first responders throughout an incident.

**Recovery** – Once an incident has been stabilized, recovery begins. If a tank car has been damaged and cannot travel safely on the railroad, the contents must be transferred to an undamaged car. Union Pacific owns and operates all equipment necessary to transfer any liquid or compressed gas from one tank car to another. After a tank car becomes liquid free, HMM purges and cleans the damaged car to ensure it can be safely repaired or dismantled. Once all hazardous materials have been removed from the incident site, HMM transitions the project to the Union Pacific Site Remediation group for remediation and closure with regulatory agencies. The final steps of recovery include a debriefing with the public responders and an internal post-incident analysis. These activities are an invaluable means of augmenting the group's overall capability to respond to a hazmat-related incident.

HMM recently expanded its fleet of training tools with a mobile classroom. The former insulated boxcar turned climate-controlled learning environment is coupled with training tank cars to bring hands-on educational opportunities to fire departments along Union Pacific lines.

Emergency Response raper, Hozerbox Materials, Deuela att a tartera Materials



Omaha Rescue 33 Firefighter Nick Gangwish, left, and Union Pacific Hazardous Materials Manger Ben Salo.

### **CRUDE-BY-RAIL**

We understand the risks associated with <u>crude-by-rail</u> are a real concern and take our responsibility to ship crude oil, as mandated by federal law, seriously. We follow strict safety practices, and in many cases, exceed federal safety regulations.

Union Pacific works collaboratively with other railroads, customers and the U.S. Department of Transportation to maximize crude-by-rail safety without compromising operational efficiencies necessary to make America run smoothly. This extended to participating in the railroad industry's crude-by-rail <u>voluntary safety operating practices</u> announced Feb. 21, 2014, by U.S. Transportation Secretary Anthony Foxx. These voluntary safety measures included train speed slowdowns through Department of Homeland Security-designated High Threat Urban Areas, increased track inspections, enhanced braking systems, expanded use of rail traffic routing technology to include crude oil, intensified community relations programs, and stepped-up emergency response capability planning and training. In 2014, Union Pacific joined other railroads to help first responders with community-specific education needs, contributing \$5 million to develop a specialized, comprehensive crude-by-rail training and tuition assistance program.

In 2015, the Federal Railroad Administration (FRA) issued an Emergency Order and Safety Advisories addressing operating practices affecting high hazardous flammable materials transport. The issuances were followed by tank car regulations released by the Department of Transportation (DOT). Union Pacific fully supports efforts to make the rail system even safer. The DOT rules are a step in the right direction, but some of the changes will have far-reaching negative consequences for the railroads, our customers and the broader economy. For instance, Union Pacific believes electronicallycontrolled pneumatic (ECP) brakes do not provide significantly greater safety benefits than distributed power, especially on the terrain through which our trains operate. For updates, visit our Crude by Rail Web page.

### **ASKRAIL RESPONSE TOOL**

Union Pacific is introducing first responders on our rail network to AskRail,<sup>™</sup> a near real-time mobile application produced by the Association of American Railroads (AAR).

Union Pacific's Hazardous Materials Management (HMM) team members work with local emergency responders along Union Pacific rail lines to grant access to the AskRail app. Once first responders have downloaded the AskRail app onto their mobile device, they can enter the identification number located on a tank car to identify the car's contents. AskRail supplements the existing response process Union Pacific's HMM group uses to collaborate and communicate with emergency responders during a hazardous materials-related incident.

50,000+	FIRST RESPONDERS TRAINED SINCE 2004
6,800	FIRST RESPONDERS TRAINED IN RAIL EMERGENCY RESPONSE IN 2014
6,000	CUSTOMER TANK CAR SECURITY INSPECTIONS CONDUCTED ANNUALLY
1.200	FIRST RESPONDERS INVITED BY UNION PACIFIC TO USE THE ASKRAIL APP
300+	FIREFIGHTERS TRAINED IN CRUDE-BY-RAIL SECURITY IN 2014



Equipment ID is a set of letters (up to 4) and numbers (up to 6) on the side of every freight car. See the example below outlined in red.



# Issue in Focus: Derailment Prevention

At Union Pacific, we take our responsibility for safe, reliable, efficient service seriously, and that means using all tools at our disposal to prevent derailments.

Employees engaged in continuous improvement, risk identification and mitigation, work standardization, variability elimination, Total Safety Culture and other initiatives are identifying the root causes of derailments, addressing potential risk, proposing solutions and consistently enhancing processes to improve safety and service. As a result of these efforts and our innovative technological solutions, these incidents are becoming increasingly rare. Derailments decreased by 7 percent from 2013 to 2014, from 3.24 reportable derailment incidents per million train miles to 3.00, and by 38 percent over the last 10 years. Our goal is to have zero derailments.

Some of the specific ways that Union Pacific and our employees are reducing derailments include:







#### Houston, You Solved a Problem

Houston-area employees are creating solutions through teamwork. The local Derailment Prevention Team presented its best safety practices at the Association of American Railroads Leadership Forum. Through use of the 8-step Problem Solving Process, months of observation, countless hours of interpreting feedback and analyzing data, team members identified the top three causes of human-factor derailments at their location and developed initiatives to target each. The result was a reduction of more than 50 percent in the monthly average of human-factor incidents.

#### **Geometry Cars**

In addition to relying on employees' expertise, Union Pacific deploys cutting-edge technological solutions to help prevent derailments. Two 105-ton geometry cars travel an estimated 70,000 miles of rail annually to check the rail's gauge, alignment, profile, cross-level, elevation, curvature, curve speed, harmonics and warp. These cars also check rail wear and clearance, as well as ballast measurements. These tests help predict where derailments may be more likely to occur, so that preventive maintenance can be conducted.

#### Wind Monitoring Devices

Wind monitoring devices reduce the risk of high winds blowing over trains, notifying us immediately when wind speed reaches certain thresholds so we can take preventive action.

#### Machine Vision Imaging System

Currently in test phases, these cameras take images of railroad cars traveling along our tracks. The technology allows out-of-tolerance conditions and deviations to be detected and further reviewed.

# Key Awards and Recognition

- <u>National TRANSCAER Award Recipients Recognized for Improving Safety of Transporting</u> <u>Hazardous Materials\*</u>
- <u>Union Pacific Railroad Police Receive CALEA Accreditation</u>

\*Awarded in 2014 for 2013 performance.

2014 Sustainability and Citizenship Report **STRENGTHENING COMMUNITIES** 



Tiffany Kellum, manager-track maintenance

### Strengthening Communities

By creating thousands of good jobs, partnering with local governments, investing in our network infrastructure, and volunteering time and resources, Union Pacific and its employees are constantly working to build and strengthen the communities in which we operate. Additionally, our supplier diversity program helps create opportunities for hundreds of minority- and women-owned businesses nationwide.

### **HIGHLIGHTS, CHALLENGES AND OPPORTUNITIES**

We are particularly proud of the completion of <u>Tower 55</u>, a major upgrade to a railroad intersection in Fort Worth, Texas, that has been in operation for more than a century. A partnership between Union Pacific, BNSF Railway, and federal, state and local government officials made it possible to reduce delays at this intersection. It boosted the local economy, tied together the fastest growing markets in Texas, reduced emissions and improved vehicle traffic flows.

Another accomplishment last year was increasing our spending with minority- and womenowned businesses by 5 percent, compared with 2013, to more than \$500 million.

Building a diverse workforce remains a focus for Union Pacific. We strive to create a workforce of talented employees who represent a cross-section of our communities.

We see an opportunity to further deepen our relationship with the veteran community. In 2014, Union Pacific hired over 1,700 veterans, including more than 160 disabled veterans. We strive to continue serving as an employer of choice for service members entering the civilian workforce.

# 2014 State-by-State Economic Impact

State	Employees	Payroll*	Route Miles	Capital Spending*	In-State Purchases*
Arizona	1,319	112.5	634	75.1	69.9
Arkansas	2,989	246.3	1,316	162.2	54.2
California	5,029	448.1	2,755	432.1	269.3
Colorado	1,378	121.8	1,153	53.6	237.2
Idaho	924	85.5	843	38.8	10.8
Illinois	4,101	375.8	1,448	90.0	1,782.1
lowa	1,819	147.4	1,290	59.8	102.2
Kansas	1,532	149.4	1,563	136.7	344.5
Louisiana	1,262	123.9	846	152.2	21.1
Minnesota	566	50.8	417	55.1	400.5
Missouri	2,917	228.6	932	80.1	450.8
Montana	14	1.3	125	5.1	3.7
Nebraska	8,021	1,186.6	976	330.6	202.8
Nevada	592	44.5	1,193	105.2	50.3
New Mexico	474	47.0	535	116.7	2.0
Oklahoma	390	42.1	514	36.9	144.6
Oregon	1,698	144.6	868	81.1	116.2
Tennessee	61	3.7	9	230.0	50.3
Texas	8,282	741.5	5,085	623.3	2,586.8
Utah	1,505	134.3	1,246	80.5	177.7
Washington	353	27.5	261	17.4	118.0
Wisconsin	488	46.6	596	75.2	67.9
Wyoming	1,308	103.6	766	62.4	73.9

\*in millions

# Providing Good Jobs

Union Pacific provides good jobs to strong candidates in our communities. These jobs offer <u>great benefits</u> and growth opportunities. In 2014, Union Pacific hired over 5,700 new employees.

In 2014, 40 percent of new hires were referred to Union Pacific by current employees. As we seek to grow workforce diversity and meet customer needs, Union Pacific has an opportunity to strengthen our workforce by encouraging every employee to be a recruiter.



Eddie Gonzales, conductor

#### OUR COMMITMENT TO MILITARY VETERANS

Union Pacific supports the men and women who serve our nation by hiring veterans when they return to civilian life. In 2014, Union Pacific hired 1,727 veterans, representing 28 percent of new employees, up from 24.6 percent in 2013. Almost 10 percent of these new hires are disabled veterans. Today, about 19 percent of all Union Pacific employees have served in uniform. After hiring, Union Pacific continues to support them through programs like UPVETS, an <u>Employee Resource Group</u> dedicated to recruiting, developing and retaining military veterans.

Union Pacific also supports the Wounded Warrior Project, a program dedicated to serving veterans and service members who have incurred an injury related to military service on or after Sept. 11, 2001. In April 2014, Union Pacific donated \$150,000 to the Wounded Warrior Project. This was Union Pacific's second contribution, following \$60,000 in 2012.

# **Connecting with Communities**

### **COMMUNITY VOLUNTEERING AND UNION PACIFIC FOUNDATION**

In 2014, through employee volunteering and financial contributions from the company's charitable foundation, Union Pacific supported many communities in which the company operates. Some examples include:

#### Youth Task Force, St. Paul, Minnesota

Faced with an increase in the incidence of underage drinking and smoking, the mayor of St. Paul, Minnesota, created a task force of children in grades five through 12 to address the lack of activities for area youth. Today, the Union Pacific Foundation provides 60 to 70 percent of the task force's budget, enabling it to put on a variety of community events, including weekly Swimming Under the Stars pool parties each summer. Task force participants used the funds raised at this event to send supplies to a school in Sierra Leone.

#### **Riverside Library and Cultural Center, Evans, Colorado**

After heavy rains and flooding devastated towns along Colorado's Front Range in September 2013, Union Pacific stepped in with emergency funding for the town of Evans. As residents prepared for the long process of rebuilding, the Union Pacific Foundation provided a donation of \$50,000 in 2014 toward construction of the new Riverside Library and Cultural Center.

#### **Midnight Mission, Los Angeles**

The Los Angeles Midnight Mission offers job training, education, work programs and more to help homeless people achieve self-sufficiency. Through grants from the Union Pacific Foundation and volunteerism, Union Pacific is supporting community members in their time of need. Last year, Union Pacific employees volunteered their time at the mission serving meals and also collected jackets for the mission clients.

### EARTH DAY EVENTS

Union Pacific employees participate in a month-long Earth Day initiative each April that promotes environmental conservation. In 2014, Union Pacific collaborated with Fontenelle Forest – one of Nebraska's oldest conservation organizations and one of the nation's largest private nature centers – to build a school program focused on migratory birds.

As part of this program, Union Pacific employees volunteered nearly 1,000 hours to hold 40 events across the Union Pacific system that reached 5,000 people. The program encouraged students to actively apply Earth Day fundamentals in all aspects of their lives. Students attended a presentation on migratory bird patterns, made bird seed cookies and built paper birds.



Union Pacific Director of Commercial Equipment-Intermodal Holly Styskal, makes bird seed cookies with Omaha, Nebraska, students.

### **URBAN PLANNING SUPPORT**

Union Pacific contributes to the communities in which it operates by providing tools to support alternative transportation. These efforts, underway since 2010, aim to reduce our employees' environmental footprint, reduce congestion on roads and encourage residents to lead active lifestyles.

In the Omaha area, where about 10 percent of Union Pacific employees live, the company works with the Metropolitan Area Planning Agency (MAPA), an association of local governments in eastern Nebraska and western lowa that brings together local and regional officials and citizens to address planning issues. Here's how Union Pacific collaborated with MAPA and related organizations last year:

- Union Pacific competed in the National Bike Challenge, a nationwide event that sought to encourage 50,000 riders to pedal 30 million miles. More than 50 bike stalls are available at Union Pacific Center, and they are typically full from early spring to late fall.
- Union Pacific encouraged ridership on Omaha-area buses. One employee became particularly involved in his community's public transportation decisions. Tom Lamcyzk, an employee in Union Pacific's National Customer Service Center, helped frame the discussion for Omaha's metropolitan transportation agency to change the route for an express bus to and from three Omaha suburbs.
- Union Pacific collaborated on carpooling with MetrO! Rideshare, which provides ride matching capabilities, and employees competed in the Commuter Challenge, which encourages people to try "active transportation," including walking, biking, carpooling and riding the bus.
- Employees provided feedback on MAPA's Heartland 2050, the first collaborative strategic planning process to address anticipated growth through infrastructure and services, while maintaining a high quality of life.

### **PUBLIC PRIVATE PARTNERSHIP**

In 2013 and 2014, Union Pacific partnered with BNSF Railway and federal, state and local government officials to <u>upgrade Tower 55</u>, a major railroad intersection in Fort Worth, Texas, that has been in service since 1904. Over time, Tower 55 saw a significant increase in railroad traffic, and by 2013, more than 100 freight and passenger trains traversed the junction each day. Unfortunately, this volume exceeded its fluid capacity range, and trains experienced delays of up to 90 minutes daily, often blocking grade crossings.

The upgrade added a third north/south main line track through Tower 55. The project also added new switches and sidings to allow increased simultaneous train movements and faster train speeds. Modern signaling and control systems installed during this project include Positive Train Control compatibility, a new federally mandated rail safety system. The upgrade also enhanced city arterial intersections and closed two grade crossings. A new emergency vehicle access was incorporated to allow for faster response time to a nearby neighborhood.

The Tower 55 improvements benefit the railroads, communities and the environment. The rail intersection can accommodate an estimated 25 percent more train traffic and has eliminated significant train delays.

Each day, Union Pacific and BNSF Railway save enough diesel fuel to equal the annual fuel consumption of 14,000 Fort Worth commuters, reducing carbon dioxide emissions by 93,000 tons per year. Reduced motorist and pedestrian delays save commuters 100,000 hours per year.



Union Pacific crews upgrade Tower 55.

### **EMPLOYEE MATCHING GIFTS**

Union Pacific's GivePLUS program encourages employees to donate money or volunteer personal time to support their communities. The GivePLUS program has two components: MoneyPLUS, which supports and extends employees' financial contributions to qualified 501(c)(3) nonprofit organizations, and TimePLUS, which provides a \$250 gift from Union Pacific to organizations where employees volunteer.

# Enhancing America's Rail Infrastructure

It's in the best interest of our customers, shareholders, and the more than 7,300 communities where our employees and their families live, work and play to operate as safely as possible. Union Pacific employees participate in rigorous safety training programs and are trained to identify and prevent potential derailments. Keeping trains on the tracks is a full-time job for thousands of Union Pacific track maintenance employees, track inspectors and civil engineering professionals. In addition to the human expertise devoted to track inspection and renewal, we regularly inspect our track using a number of leading technologies:

- Lasers and ultrasound, which identify rail imperfections.
- Acoustic wheel vibration tracking, which forecasts potential failures before they happen.
- Trackside sensors, which perform a real-time analysis of every rail car moving on our system, equaling 20 million car evaluations per day.

- Bridge inspections, which are performed regularly on all bridges on the Union Pacific network to assure structural integrity.
- Additional inspections, which are performed during extreme weather and after earthquakes.

Our \$4.1 billion 2014 capital program contributes to these investments. Among our major investment categories, we are replacing and improving track infrastructure and upgrading our locomotive, freight car and container fleets. We also made significant investments in technology improvements, including about \$385 million for Positive Train Control, a federally mandated rail safety system. When it comes to investing in safety, we don't hold back.

See the <u>Operating Safely section</u> for more info on Union Pacific's derailment prevention strategies.

 Image: Worke than
 Signal & Detection Device Inspections in 2014

 Image: Signal & Detection Device Inspections in 2014
 222,000 miles of Electronic track Inspection In 2014

 Image: Signal & Miles of Visual track Inspection In 2014
 4.8 MILLION miles of Visual track Inspection In 2014

 Image: Signal & Signal & Detections In 2014
 38,600 bridge Inspections In 2014

# Supply Chain

### SUPPLIER DIVERSITY

For more than 30 years, Union Pacific has demonstrated its commitment to supporting and <u>embracing supplier diversity</u>. Our supplier diversity program was the first among the largest U.S. railroads. The program permeates the entire organization, including purchases of fuel, engineering services, railroad maintenance and construction materials, rolling stock maintenance and technology.

Union Pacific spent \$509 million last year with minority- and women-owned businesses, purchasing goods or services from more than 600 diverse suppliers in 39 states, including all 23 in which we operate. Spending with diverse suppliers grew by an average of 9.4 percent each year from 2008 to 2014, including an approximately 5 percent increase over 2013. About 30 percent of Union Pacific's critical suppliers reported purchasing goods or services from diverse suppliers, demonstrating their support of our supplier diversity initiative.

Union Pacific is a member of the National Minority Supplier Development Council (NMSDC), NMSDC's Transportation Group and the Women's Business Enterprise National Council. Union Pacific has received numerous recognitions for its supplier diversity program, including:

- Recognized as Hispanic Business Magazine's "BEST of the BEST for Supplier Diversity"
- Named as one of Hispanic Network Magazine's "Top Supplier Diversity Programs"
- Recognized by Professional Woman's Magazine as one of the "Top Supplier Diversity Programs for Women"
- Awarded "Who's Who for Supplier Diversity" designation by Minority Business USA

### SUPPLIER CODE OF CONDUCT

Union Pacific is committed to high standards of ethical business conduct. As a condition of doing business with Union Pacific, all suppliers must fully comply with all federal, state and local laws, rules, regulations, orders, codes and ordinances as outlined in their contract with Union Pacific, as well as with <u>Union Pacific's Supplier Code of Conduct</u>. Union Pacific requires suppliers to report any violations of this code by calling Union Pacific's dedicated values line. Suppliers also are bound to comply with the U.S. federal government's <u>Foreign Corrupt Practices Act</u>.

# Key Awards and Recognition

- <u>Rail Carrier of the Year from Lowe's Home Improvement\*</u>
- <u>Rail Carrier of the Year by WWL Vehicle Services Americas\*</u>
- <u>Railroad Company of the Year by Evergreen Shipping Agency (America) Corp.\*</u>
- Logistics Excellence Award for Customer Service from Toyota Logistics Services\*
- Preferred Supplier for Ford Motor Company
- 'Club Elite' Recognition from Hyundai GLOVIS
- EMQ Families First 2014 Above and Beyond Award
- American Railway Engineering and Maintenance-of-Way Association's Hay Award for Santa Teresa design
- <u>Among Professional Woman's Magazine's Top Supplier Diversity Programs for Women</u>
- · Among Hispanic Business Magazine's Best of the Best for Supplier Diversity
- Among Hispanic Network Magazine's Top Supplier Diversity Programs
- Minority Business USA's Who's Who for Supplier Diversity designation

\*Awarded in 2014 for 2013 performance.

#### WORLD WIDE TECHNOLOGY SUPPLIER DIVERSITY SPOTLIGHT

Union Pacific is proud to work with a wide variety of companies that share our values. One such business is World Wide Technology, Inc. (WWT), a global systems integrator that provides innovative supply chain solutions and a proven approach to evaluate, architect and implement technology for its customers.

WWT looks to maintain a workforce culture that embraces diversity of people and thought. This extends to the company's operations, as well as its own supply chain. Over the past year, WWT worked with 250 diverse suppliers, spending nearly \$200 million. This capped three consecutive years of increased spend with an expanding pool of diverse partners.

As Union Pacific aims toward its vision of Building America, working with companies like WWT helps provide the physical infrastructure to connect communities across the nation. We will continue partnering with businesses that prioritize investing in a diverse workforce to serve as the foundation for a stronger and more resilient economy.

2014 Sustainability and Citizenship Report **ENGAGING EMPLOYEES** 



Srinath Sathyanarayanan, senior systems consultant

# **Engaging Employees**

Employees are at the center of Union Pacific's business. Our highly skilled workforce enables us to fulfill our goal of Building America. That's why we invest significant resources to make sure our employees have the training and support they need to succeed.

#### **HIGHLIGHTS, CHALLENGES AND OPPORTUNITIES**

Union Pacific provides excellent jobs to our employees, offering great benefits, a comprehensive wellness program and ample opportunities for training and development. Through these programs, we strive to build a strong, healthy and highly skilled workforce.

Union Pacific has a steadfast commitment to employee recruitment and development, and we seek new ways to strengthen employees, who are the backbone of our company. About 40 percent of all new hires are referred by current employees, but we know we have an opportunity to further attract and engage employees. As we move forward into the 21st century, we look forward to building upon the foundation of a resilient and dedicated workforce.

# Benefits

Union Pacific offers a <u>comprehensive benefits program</u> to our employees, including medical insurance, educational assistance, a pension and a 401(k). These benefits vary based on whether an employee is non-union or part of a collective bargaining agreement. Learn more about Union Pacific benefits on our <u>Sustainability and Citizenship Web pages</u>.



Amiria Matlock, section foreman

### Labor Agreements

About 85 percent of Union Pacific employees are covered under Collective Bargaining Agreements (CBAs) unique to 14 different unions. These agreements cover wages, benefits and work rules.

#### **POPULATION (TOTAL COMPANY)**

Female	6%
Male	94%
Asian	2%
Black	11%
Caucasian	73%
Hispanic	12%
Native American	2%
Traditionalists (born before 1946)	>1%
Baby Boomers (born 1946-1964)	32%
Generation X (born 1965-1981)	48%
Millennial (born after 1981)	19%

#### SENIOR MANAGEMENT

Female	17%
Male	83%
Asian	1%
Black	6%
Caucasian	88%
Hispanic	4%
Native American	1%

# Offering a Path to Wellness

Through Union Pacific's wellness program, we encourage employees to "Take Charge. Feel Better. Live More." To support that philosophy, we continue expanding the number of tools available to help our employees make healthy choices and proactively address mental and physical health concerns.

Union Pacific Health and Medical Services helps employees manage a variety of wellnessrelated issues. For example, Union Pacific's System Health Injury Protocol (SHIP II) assists employees who may be at risk for injury because of low fitness levels. The program gives employees access to personal training sessions, as well as consultations with a nutritionist, to help them achieve their fitness goals. For employees who sustain an injury, the company's Return to Work (RTW) program enables them to perform productive, meaningful work activities within their physical capabilities as defined by their physicians. Additionally, Union Pacific provides education and assistance for issues including substance abuse, alertness and stress.

Other wellness programs available to employees include:

- Health Coaching: Personalized coaching is available to employees and spouses for health risks including stress, depression, smoking, diabetes, nutrition education and weight management.
- Employee Assistance Program: This program offers all employees and their families counseling and referral services for personal or work-related problems.
- Annual Wellness Incentives: Incentives are available to non-union employees and their spouses for completing a wellness assessment and an annual physical.

Additional examples can be found on our Sustainability and Citizenship Web pages.

### WELLNESS CHALLENGE

To increase participation in wellness programs and employee health, Union Pacific's Worksite Wellness Challenge recognizes individual work units that have adopted and fostered world-class wellness programs. Launched in 2013, the challenge evaluates and scores all work units on their wellness and safety education objectives. Each worksite receives points based on its level of engagement, resulting in each participating worksite being awarded a "bronze," "silver," or "gold" designation. In 2014, 51 of 53 work units received a bronze, silver or gold recognition.

### **UP WAY**

The UP Way is an integral part of our culture at Union Pacific. It engages all employees to consistently work to improve safety, service and productivity by providing the methods, tools and processes to standardize work, eliminate variability and waste, and solve problems at their root cause. The UP Way:

- Supports our mission Dedicated to Serve and our values – performance, high ethics and teamwork.
- Ties to our leadership attributes of vision, commitment, communication, teamwork and respect.

Strong employee engagement is a crucial part of the UP Way. When our employees actively take part in our culture of continuous improvement, we can achieve three related goals – world-class safety, service excellence and increased productivity. These grow our business and improve job security. Outcomes include:

- A safer and better work environment
- Employees who design and continuously improve their work
- Consistent and predictable work processes
- Better understanding of expectations and processes
- Improved working relationships
- Sustained process improvements

# **Employee Resource Groups**

Union Pacific's Employee Resource Groups (ERGs) are networks of employees that help Union Pacific nurture a diverse workforce where all employees can do their best work. Each ERG has an executive sponsor, which ensures these groups can direct management's attention to issues of particular concern. ERGs not only support their own members, but also provide educational experiences for all employees and service to the communities in which Union Pacific operates.

Roughly 3,000 employees companywide are involved in one or more Employee Resource Group. Membership continues to grow, and 2014 saw a large increase in representation of field chapters within these groups.

Union Pacific's Employee Resource Groups include:

- Asian Employee Resource Organization (AERO)
- Black Employee Network (BEN)
- BRIDGES: Union Pacific LGBT Employee Network
- Council of Native American Heritage (CONAH)
- Latino Employee Network (LEN)
- LEAD: A Women's Initiative Lead Educate Achieve and Develop
- UP Ties: Emerging Professionals Network
- UPVETS

Additional information on each Employee Resource Group can be found on our <u>Sustainability and Citizenship Web pages</u>. In addition to facilitating the ERGs above, Union Pacific supports diverse communities in the states and cities where the company operates. For example, Union Pacific serves as a major sponsor of the annual Heartland Latino Leadership Conference held in Omaha, Nebraska.



# Auxiliary Work and Training Status

When an employee surplus occurs, in lieu of furloughs, about 60 percent of train and yard employees are covered under AWTS agreements, which guarantee employees eight work or training days per month, continued full healthcare benefits and accrual of service time toward Railroad Retirement. In addition to providing for our employees, AWTS helps the company by allowing employees to remain current on training and maintain their proficiency, thereby allowing them to return to full-time work faster when the demand returns.

### **GROWING VOLUMES, SURGE RESOURCES**

In 2014, we handled 7 percent more volume than in 2013, and we overcame weather-related delays. Maintaining a ready workforce and surge resources – locomotives and equipment – was crucial in handling the increased volume.

In fact, we ran nearly as many annual carloads as our all-time high in 2006, but we did it more than 2 mph faster. To put that in perspective, operating an average of 1 mph faster is the equivalent of adding 150 to 200 locomotives and 100 to 200 or more train, engine and yard employees.

Transporting goods on time is crucial for customer satisfaction, and the AWTS program, unique in the industry, gave Union Pacific a ready pool of talent to call back to work when volumes surged.

# Training and Career Development

Union Pacific offers training and career development opportunities to our employees, helping us cultivate a high-quality workforce capable of the challenging work this industry demands. Training also helps keep our employees safe on the job. In 2014, Union Pacific conducted 1.9 million hours of safety-related training, an increase from 1.65 million hours in 2013.

Some of Union Pacific's training and career development programs include:

- New Employee Onboarding Program: Company and department orientations are a primary focus of our new employee onboarding process. Along with communication and industry-specific training, we provide an interactive electronic-learning experience and an instructor-led orientation program.
- Skill Development: We offer a variety of technical, communication, safety and environmental trainings.
- Transitional Training: Union Pacific is dedicated to preparing degreed and non-degreed employees for key transition points in their careers.
- Emerging Leaders: We seek to maintain a strong pipeline of leaders. This means developing individuals who can move into higher levels of organizational leadership. We offer a series of leadership programs that vary from a three-day course to 10 months of intensive training.
- Transportation Operations Training: Operational excellence is a core competency for Union Pacific, especially as we seek to grow our business through superior service. Our Field Management Trainee (FMT) program, for employees with prior experience in field operations, and Operations Management Trainee (OMT) program, for those new to operations, provide a hands-on opportunity to manage transportation operations.

RETENTION RATE	OPERATIONS Management Trainee	FIELD Management Trainee
2010	56%	73%
2011	61%	75%
2012	72%	77%
2013	85%	86%
2014	94%	98%

2014 TRAINING	NONAGREEMENT	AGREEMENT
Total Training Hours	496,741	3,721,332
Number of Employees	7,135	45,786
Average Hours/ Employee	70	81

#### OPERATIONS MANAGEMENT TRAINEE SPOTLIGHT: JEFF HITE

As an employee who has gone through Union Pacific's Operations Management Trainee (OMT) program, I can say firsthand that the instructors of this program are some of Union Pacific's greatest assets. The OMT program gave me the confidence I needed to start leading employees. Union Pacific has the most professional and safest employees in the business. They expect a lot from their leadership, but this program gave me a solid foundation to build upon. Even now, after completing the program, I feel that I can still call upon my former instructors for mentorship and advice.

In addition to the job training I received as part of the OMT program, I felt that the networking opportunities available to trainees were also incredibly valuable. The meet-and-greets and socials that we attended during the program allowed me to meet many professionals from all over the Union Pacific system. Now, if I am in a pinch and need to call on someone, I have a long list of people to ask for advice, and I am confident that I will get the correct answer. Of all the professional development classes that I have taken all over the world throughout my life, this program tops them all.



Manager of Yard Operations Jeff Hite, center, meets with train crew members Conductor Jeff Douglas, left, and Locomotive Engineer Weston Smith.

# Key Awards and Recognition

- Fourth on G.I. Jobs' Military-Friendly Companies List
- <u>A Best Employer for Healthy Lifestyles</u>
- A Top Employer for Veterans
- <u>Recognized for Commitment to Veteran Hiring</u>



#### Jack Koraleski Union Pacific Chairman

• Recognized by Institutional Investor as No. 1 chief executive officer in the Airfreight and Surface Transportation sector\*



#### Rob Knight

Chief Financial Officer and Executive Vice President-Finance

- Honored by Institutional Investor as No. 1 transportation chief financial officer in the Airfreight and Surface Transportation sector\*
- Named No. 2 on The Wall Street Journal's list of Top Performing CFOs in the S&P 500



#### Lynn Kelley

Vice President-Supply Chain and Continuous Improvement

 Honored as a Woman Worth Watching by Profiles in Diversity Journal

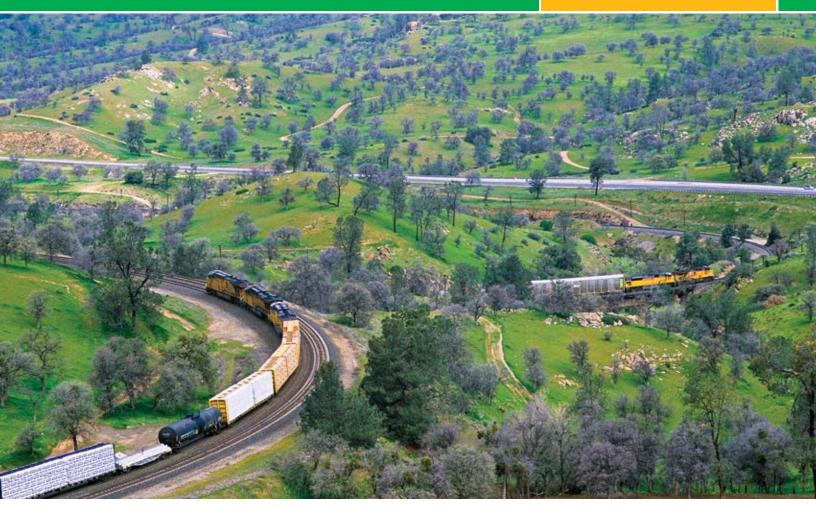
#### INTERN CONNECTION PROGRAM

Union Pacific's companywide Intern Connection Program (ICP) allows college students to learn about Union Pacific, discover the different functional departments, volunteer in the community and network with senior leaders. The ICP organizes events throughout the year, with a summer "peak season" that coincides with an influx of interns.

#### **EDUCATIONAL** ASSISTANCE

Higher education provides professional and personal development opportunities for those seeking to advance in the company. Union Pacific offers educational assistance to all full-time employees who have been employed for at least six months by the time classes begin. Tuition reimbursement is given to full-time employees who enroll in job- or career-related courses at accredited schools, colleges and universities, up to a maximum of \$5,250 per calendar year, potentially covering up to 100 percent of tuition over the course of a degree.

\*Awarded in 2015 for 2014 performance



### Preserving the Environment

Union Pacific recognizes that we must preserve the environment in which we operate. We believe that any long-term approach to climate change must include measures that fuse a reduced carbon footprint together with economic growth and prosperity. That is why we do our part to protect the environment, while enabling a strong, sustainable and resilient economy that can respond with innovation in the face of challenges.

The Association of American Railroads has determined that if just 10 percent of the nation's long-haul freight currently moving on highways was diverted to rail, 1 billion gallons of fuel would be saved and greenhouse gas emissions would decrease by 10 million tons. Union Pacific seeks to protect the earth in ways that extend beyond the competitive environmental advantage that trains offer. We invest in technology and training, and we continue to actively work to reduce the impacts of our operations.

#### HIGHLIGHTS, CHALLENGES AND OPPORTUNITIES

Union Pacific improved locomotive fuel efficiency in 2014 and building upon that, we strive to meet our new goal of a 1 percent annual reduction in our locomotive emissions rate from 2015 through 2017.

We completed CDP's water questionnaire for the first time, understanding that this is an issue of rising importance for our stakeholders. Our collaborations also continued to bear fruit, ranging from working with the Environmental Defense Fund (EDF) through its Climate Corps Program to working with suppliers to further reduce locomotive emissions.

Union Pacific recognizes the opportunities that technology offers in environmental management. We pride ourselves on investing capital back into the company, and we remain mindful of our environmental impacts as we explore new capabilities that lead to business success.

# Addressing Climate Risk

Union Pacific proactively assesses the risk climate change poses to our operations.

We are strengthening our railroad's ability to withstand future changes and events that might be associated with climate change. Temperature extremes could create a harsher work environment for employees who work outside, increase rail maintenance costs and impact service by decreasing the velocity of operations. In addition, severe weather events, such as hurricanes, could impact Union Pacific's network by necessitating slower speeds, which would lead to service interruptions, or by increasing track repair and recovery costs.

Union Pacific educates the public and elected officials about how the rail industry's growth can mitigate some climate change impacts. We also work closely with public agencies to study and advance technology that will reduce emissions from our network and in our yards. For instance, we strategically locate the newest, lowestemitting locomotives in parts of the country with air quality challenges.

In addition, Union Pacific uses an Enterprise Risk Management process to incorporate input from several internal departments, including Strategic Planning, Operations, Law and the Environmental Management Group, to identify potential climate change risks and opportunities. Each department plays a role in managing risks and opportunities and evaluating materiality and priorities.

Oversight for sustainability issues is taken seriously at Union Pacific. Our vice president of safety, security and environment and chief safety officer has direct responsibility for Union Pacific's progress and status regarding climate change, and reports directly to the board of directors at least annually regarding the company's implementation of its environmental policy, including its activities related to climate change. The vice president of safety, security and environment also reports directly to the chief executive officer and president regarding compliance with the company's environmental policy.

We continue exploring new ways to reduce our fuel consumption by developing innovative locomotive technology, strengthening locomotive engineer training and teaching employees to conserve.

For additional information on how climate change could have a material adverse effect on our operational results, financial condition and liquidity, see the risk factors in our <u>Annual Report</u> on Form 10-K.

# **Environmental Management**

For the good of our business, earth and communities, we strive to maintain our leadership role in providing safe, reliable, fuel-efficient and environmentally responsible transportation of the goods families and businesses need.

Our Environmental Management Group, which oversees Union Pacific's compliance with environmental laws and regulations through our Environmental Management System, is strategically integrated into the company's daily operations.

Ensuring that best practices are followed to reduce environmental impact requires planning, coordination and communication – and employees' hands-on involvement and awareness.

To support railroad operations, Union Pacific's environmental management efforts begin with our <u>Environmental Policy</u> as signed by our CEO. The policy applies to all aspects of our operation and outlines three primary commitments every employee must make:

- Pollution prevention
- Regulatory compliance
- Continuous improvement

These actions ensure that we align our environmental focus with our overall corporate mission of service – working for the good of employees, customers, shareholders and the communities we serve and call home. To ensure accurate reporting of our environmental performance, we use sophisticated systems and programs that track detailed metrics. The goal is to ensure we meet or exceed all applicable laws regulating our environmental impact. Our environmental management mission is:

- **Prevention**. Prevent the causes of environmental damage that result from operations.
- **Preparedness**. Align with internal and external customers to prepare for effective response and tomorrow's environmental issues.
- **Response**. Respond to emergencies involving environmentally sensitive materials to minimize health, environmental, operational and financial impact.
- **Recovery**. Restore the environment as a result of contamination for which Union Pacific is responsible.

# Greenhouse Gas Emissions

#### **OUR GOAL:** Reduce locomotive fuel consumption rate 1 percent annually from 2015 to 2017.

As part of our efforts to address climate change, Union Pacific has committed to reduce locomotive fuel consumption, which accounts for nearly all of our greenhouse gas (GHG) emissions. We demonstrated this commitment in 2011 by setting our first goal to reduce our fuel consumption rate 1 percent annually from 2011 through 2015.

We encountered challenges progressing toward this initial goal, driven primarily by a change in our freight traffic mix. We did, however, decrease our fuel consumption rate by 1 percent in 2014 compared to 2013, finding new opportunities to reduce waste and continuing to deploy technologies that assist the locomotive engineer in saving fuel and that optimize train scheduling.

In goal setting, the company aims for the appropriate balance between financial returns, environmental performance and social commitment. We use operational and technological improvements to drive the majority of our greenhouse gas emissions reductions.

We believe the annual 1 percent reduction remains a viable objective as we forecast business and fuel saving initiatives, and have restated this as our goal from 2015 to 2017.

Reducing our fuel consumption remains a corporate priority. Senior leadership is focused on this objective, and success is directly tied to compensation based on our performance review process.

#### **OUR PERFORMANCE**

Union Pacific produced a total of 12,666,733 metric tons of GHG emissions from fossil fuels in 2014, which is up from 2013, due primarily to an increase in volume.

Union Pacific's emissions from biomass sources were 87,744 metric tons.

Scope 3 emissions from employee travel totaled 19,977 metric tons. Employee travel includes rental car fuel and commercial air travel. We worked with suppliers to identify their Scope 3 emissions on behalf of Union Pacific. Suppliers representing an estimated 27 percent of our Scope 3 spend, with emissions totaling 321,843 metric tons in 2014 compared to 262,355 in 2013.

Union Pacific's 2014 greenhouse gas inventory was verified by Conestoga-Rovers & Associates. Union Pacific works with Trinity Consultants to compile our GHG inventory. Conestoga-Rovers & Associates and Trinity Consultants are independent organizations.

### **REDUCING CUSTOMERS' EMISSIONS**

Union Pacific customers helped eliminate an estimated 35.8 million metric tons of greenhouse gases by choosing rail over truck transportation for their shipping needs.

Through our <u>Carbon Emissions Estimator</u>, our customers can calculate the carbon emissions reduced when they ship goods with us. We also send customers a savings estimate for their shipments.



#### UNION PACIFIC NAMED TO CDP'S CARBON DISCLOSURE LEADERSHIP INDEX

Union Pacific Railroad achieved its best performance in CDP's Standard & Poor's 500 (S&P 500) climate change 2014 report for the depth and quality of climate change data it disclosed. With a carbon disclosure score of 99 out of a possible 100, Union Pacific had the highest score among railroads. It also ranked in the top 10 percent of all companies in the S&P 500 sample, securing a place on the Climate Disclosure Leadership Index.

In its sixth annual CDP disclosure, Union Pacific highlights technology, training and operational innovations designed to increase fuel efficiency. We also completed CDP's water questionnaire for the first time, which helped us further understand the breadth of our relationship to water. The survey looks at our water use, as well as that of our customers and suppliers. We view participation in this survey as part of a helpful dialogue for understanding impacts on the issue of water.

# **Increasing Fuel Efficiency**

Improving our fuel efficiency is an important part of Union Pacific's sustainability actions. Union Pacific has a multi-disciplinary locomotive fuel conservation team and emissions reduction team that meet monthly and focus in part on addressing emissions from our locomotives. Diesel fuel accounts for more than 20 percent of operating expenses, which means increasing efficiency is good for the environment and also improves our bottom line. It allows us to manage price volatility and supports the transition to a lower carbon economy.

In 2000, we could move a ton of freight 375 miles on average on one gallon of diesel fuel. By 2010, we were able to move it 495 miles. Due to changing business conditions, our efficiency rate declined to 471 miles per gallon in 2013, then increased to 475 miles in 2014 as multiple initiatives brought improved results. We continue to look for innovative ways to increase fuel efficiency, while growing as a business.

We approach fuel efficiency in our locomotive fleet through a three-pronged approach:

- Engaging employees
- Improving operations
- Incorporating technology

### **ENGAGING EMPLOYEES**

The first step in our fuel efficiency strategy is the most basic but perhaps the most important: engaging with the employees who operate our locomotives and manage our infrastructure. Because of our investment in training and coaching on the systems we operate, our employees are able to hone their train operating techniques while saving fuel.

As a company, we continue to implement and test onboard Energy Management Systems that our employees are trained to use. Among the most advanced are:

**LEADER** (Locomotive Engineer Assist/Display and Event Recorder) LEADER analyzes train operations through advanced GPS maps and provides throttle and brake prompts. Rolled out in late 2012, LEADER is now on more than 470 locomotives, running on more than 6,500 route miles.

#### Trip Optimizer (TO)

Similar to a vehicle's cruise control system, TO automatically controls a locomotive's throttle, which helps keep trains on schedule while minimizing fuel use. The TO system calculates the most efficient way of running by considering factors such as train length, weight, grade, track conditions, weather and locomotive performance. TO is now on 390 locomotives, running on more than 5,780 route miles.

#### **Smart Consist**

This system provides the locomotive engineer requested horsepower and tractive effort for the locomotive consist by selecting throttle notch combinations for the best fuel economy. More than 210 locomotives are equipped with this technology, which is enabled systemwide.

### **IMPROVING OPERATIONS**

Since 2000, Union Pacific has invested about \$7.5 billion to purchase more than 4,100 locomotives that meet the U.S. Environmental Protection Agency's Tier 0, Tier 1, Tier 2 or Tier 3 guidelines, including 261 purchased in 2014 and 100 in 2013. During this period, Union Pacific retired more than 3,000 older, less-efficient locomotives. We also have been working hard to revitalize rather than dispose of existing infrastructure. As part of those efforts, Union Pacific has overhauled or rebuilt more than 5,800 diesel engines with emissions control upgrades.

Additionally, 94 percent of our locomotives are certified under existing U.S. EPA Tier 0, Tier 1, Tier 2 or Tier 3 emissions standards, which progressively add more stringent limits on engine air emissions.

Our investments in new "switching" locomotives, which are designed to move trains or cars within a rail yard, also have helped improve fuel efficiency.

### **INCORPORATING TECHNOLOGY**

Taking advantage of the best available technology helps us maintain our strengths as a company and enables us to innovate more advanced ways to operate trains efficiently. For years, Union Pacific has set the standard for railroads nationwide in locomotive technology and research. We work with stakeholders, including suppliers, governmental organizations, employees, engineering researchers and others, as we explore and advance technological improvements in our locomotive fleet.

We continue to partner with Electro-Motive Diesel to evaluate exhaust gas recirculation (EGR), diesel oxidation catalysts and diesel particulate filters on the experimental UP 9900 locomotive, the signature unit in a series of 10 experimental emissions-reducing SD59MX locomotives. Union Pacific's experimental SD59MX locomotives are the first diesel locomotives worldwide to be equipped with EGR technology.

After more than three years operating in California, UP 9900 recently was evaluated for testing and analysis. Results were positive regarding anticipated condition and usage.

UP's investments in the technology support the industry's move toward the U.S. Environmental Protection Agency's (EPA) more stringent Tier 4 air emissions standards.

Tier 4 emissions standards for locomotives purchased after 2014 are only strengthening our commitment to environmental performance. Union Pacific is actively collaborating with locomotive manufacturers in the research and development of new technology that meets these requirements.

### LOCOMOTIVE TECHNOLOGY DECREASES FUEL CONSUMPTION

**A**. The **cab display** provides the locomotive engineer information to manage the train's energy. When combined with Positive Train Control, a federally mandated rail safety system, the cab will provide advance notification for signal and speed restrictions, helping a locomotive engineer plan train movement across the territory.

**B**. The **wattmeter** directly measures the amount of electrical energy produced by a locomotive, which helps determine how much fuel is used to generate motive power.

**C**. The **fuel meter** electronically measures locomotive fuel usage and reports the data via radio to assist with fuel planning. A typical road locomotive has a maximum fuel capacity of 5,000 gallons.

**D**. The **Ancillary Card Cage** (ACC) provides the processing power, communications and data collection capabilities to support the industry's fuel conservation efforts. Each equipped locomotive transmits about 100 megabytes of data per month (about 400 books), which equates to about one terabyte per month (about 4.5 million books) for the entire Union Pacific fleet.

**E. GPS transmitter** – During a train trip, a sophisticated network of onboard computers and GPS sync up to track profiles (grade and curves) with train length, weight and locomotive performance. It continuously calculates and updates algorithms, adjusting for changing terrain to ensure the most efficient braking and operations.

**F**. An **antenna farm** combines a locomotive's external communications devices into a single replaceable roof-mounted package. It transmits information that helps measure the positive impact of an Energy Management System on Union Pacific's fuel cost.

**G.220 MHz Radio** – A locomotive's Energy Management System uses four radios to receive detailed information about its overall performance, providing timely data to enhance fuel efficiency and increase velocity.

**H**. The **sensor package** is used to optimize fuel usage. Electrical and pneumatic sensors monitor in-train forces, tractive effort, acceleration and air brake status, and relay the information to the train's Energy Management System.

I. The **Train Management Computer (TMC)** is a host for the locomotive's Positive Train Control and Energy Management Systems. The TMC conveys movement-related information and authority from our train dispatching center to the train's onboard train-control system. The system assists a locomotive engineer by providing reminders about proper speeds, movement limits and required stopping distances.

J. An **event recorder** measures an Energy Management System's efficiency, enabling Union Pacific to calculate the effect of in-train forces, braking effort, acceleration, steep grades and curve on a train.



### **EVALUATING ALTERNATIVE FUELS**

For more than half a century, Union Pacific has explored alternative fuels including bio-diesel, propane, liquefied natural gas (LNG) and hydrogen. As early as 1952, Union Pacific kicked off a project using gas turbine-electric locomotives, and we remain the only major railroad worldwide with extensive gas turbine experience.

We continue to study the benefits of converting locomotives to LNG fuel, which emits fewer greenhouse gas emissions than diesel fuel. See <u>Union Pacific and Liquefied Natural Gas</u> for factors we consider as we determine whether LNG fuel is a commercially reliable and economical option. North American railroads operate the world's only integrated freight rail system, which means that a significant portion of our business goes onto other railroads and vice versa. As we evaluate use of alternative fuels, we also must protect the reliability of this integrated network.

### **CONSERVING ENERGY**

Locomotive diesel fuels account for 93 percent of our greenhouse gas emissions from fossil fuels, so related operational and technological improvements drive the majority of our greenhouse gas emissions reductions. Vehicles and electricity drive the greatest amount of other emissions.

Recognizing that energy use has both an environmental and business cost, Union Pacific has made efforts to conserve and reduce energy use at our facilities. Our Omaha, Nebraska, headquarters is LEED-EB Silver certified. Since initial occupancy in 2004, Union Pacific Center has maintained the U.S. Environmental Protection Agency's Energy Star designation, routinely implementing further energy conservation actions.

Additional energy conservation and reduction initiatives include:

- Union Pacific's Utility Management Team completed 45 utility conservation projects in 2014, ranging from upgrading facility lighting and air compressor systems to installing more energy-efficient HVAC systems. Energy saved from these projects is equivalent to that consumed by more than 260 U.S. homes annually.
- More than 400 outdated locomotive repair pit lights were replaced with energy efficient LED fixtures. The new lights increase safety and decrease energy and maintenance costs.
- We collaborated with the Environmental Defense Fund Climate Corps Program. Our 2014 fellow created a strategy to replace inefficient high-pressure sodium lights in maintenance shops and developed a plan to install electric sub-meters in locomotive maintenance facilities, tracking energy efficiency improvements and identifying savings opportunities. Our fellow also conducted a locomotive load testing study to determine potential fuel savings, while maintaining networkwide operating efficiency. Load testing involves running the locomotive at the highest throttle to find unit defects.
- More than 600 "Machine Shut Off" decals were installed networkwide on equipment to serve as a conservation reminder to employees.

For additional examples of our efforts to conserve energy, see our Sustainability and Citizenship Web pages.

ENERGY CONSUMPTION*	2012	2013	2014
Diesel	1,103.8 gallons	1,103.5 gallons	1,171.2 gallons
Gasoline	12.1 gallons	12.9 gallons	12.7 gallons
Other fuel	8.6 gallons	13.8 gallons	13.6 gallons
Electricity	603.5 kilowatt hours	652.9 kilowatt hours	627.1 kilowatt hours
Natural gas	1,000.8 standard cubic feet	761.8 standard cubic feet	720.4 standard cubic feet

\*estimated in millions

# **Collaborative Opportunities**

#### California Air Resources Board and California Air Districts

Union Pacific continues to work with the California Air Resources Board (CARB) and California's regulatory air districts to reduce emissions and improve air quality. Our collaboration with CARB began in the mid-1990s on a first-of-its-kind commitment to bring the most advanced and environmentally friendly locomotive technology to the South Coast Air Basin by 2010, with a continuing commitment through 2030.

Union Pacific facilitates dialogue to broaden awareness of environmental challenges as CARB and other relevant entities consider future steps. In 2014, that included working with supply chain partners to provide CARB's executive officer with a tour of Union Pacific's Intermodal Container Transfer Facility in Long Beach, California. The tour included representatives from ocean shipping, trucking and railroads and highlighted the complexity and efficiency of the goods movement system.

Union Pacific also hosted University of Illinois graduate students whom CARB has retained to explore the feasibility of operating with multiple locomotive types.

# California Council for Environmental and Economic Balance

The California Council for Environmental and Economic Balance (CCEEB) has worked since 1973 to solve the most pressing environmental policy problems facing California. CCEEB is a nonprofit, non-partisan coalition of industry, labor and public leaders dedicated to making environmental and economic balance a reality. Union Pacific has been a member and has had an employee serving on CCEEB's board since 1992.

#### **Global Environmental Management Initiative (GEMI)**

Union Pacific has been a member of the Global Environmental Management Initiative (GEMI) since 2010. GEMI brings together companies from diverse industries to solve environmental problems and provide tools for the public's use. One of our employees served on the GEMI board, and we helped GEMI launch a new set of tools called Quick Guides. See more at <u>GEMI's website</u>.

See <u>Community and Collaboration</u> for more information about Union Pacific's collaboration with public and private sector organizations.

# Waste Management

As we work to improve our efficiencies as a company and minimize our environmental impacts, reducing and diverting waste are two key objectives. We estimate that we generated about 1.10 million tons of waste in 2014. We diverted from landfills more than 840,000 tons of waste, an estimated 77 percent of our waste.

Our employees are a powerful resource for improving our waste management and environmental citizenship. In 2008, we formally began encouraging employees to suggest environmental sustainability tips and ideas. So far, we have received more than 3,200 ideas from more than 1,800 people. More than 40 percent of these suggestions led to changes in our programs and processes.

### **OUR EFFORTS**

- **Reducing Hazardous Waste**. We decreased the number of federal large quantity hazardous waste generator sites from 35 in 1991 to two in 2015. The reduction resulted from a concerted effort to replace hazardous solvents with nonhazardous ones. We also implemented a battery recycling program and began using nonhazardous water-based paints.
- Increasing Recycling. We have expanded our recycling of cardboard, paper, plastics and other municipal solid waste. By the end of 2014, recycling was in place at more than 300 locations in 150-plus cities, including virtually every major location and a significant number of smaller locations.
- **Making Smart Choices**. We have strengthened our process to ensure compliance with waste disposal regulatory requirements by keeping employees current on waste characterization changes.

### **E-WASTE**

Union Pacific recycles electronics that have reached the end of their useful life, commonly known as e-waste. The company recycled or distributed more than 270,000 pounds of electronic equipment and more than 1.2 million pounds of signal batteries.

### **FUEL AND OIL**

We recycled more than 5.3 million gallons of oil and fuel. Our equipment and maintenance processes capture used oil and fuel at our facilities for recycling. In addition, drip pans and other collection systems are placed under engines to catch spills, separators extract engine oil from wastewater and fuel nozzles shut off automatically to prevent overflow.

### Water

In accordance with our Environmental Policy, Union Pacific strives to be a responsible steward of America's resources, including water. We estimate that we used 2.085 billion gallons of water in 2014. For the first time, the company also participated in CDP's water questionnaire, outlining efforts to responsibly manage water.

The company's role in water management stretches back to our beginnings, as we frequently were the first land developer across the western United States. To this day, Union Pacific is responsible for providing safe drinking water to the public in a handful of locations. Water is challenging to manage, as we have thousands of water utility accounts across our 32,000-mile network. In addition, older structures can make it challenging to reduce our energy and water usage. We continue efforts to conserve and reduce water use at our facilities.

Protecting groundwater also is important. We prepared and implemented Spill Prevention Control and Countermeasure (SPCC) plans at more than 130 Union Pacific facilities. We also operate and maintain 89 wastewater treatment facilities that capture wastewater created during equipment washing, locomotive fueling and maintenance, intermodal crane and truck maintenance, track and roadway equipment shop maintenance and stormwater accumulation at shop facilities. To ensure it meets acceptable cleanliness levels, captured wastewater undergoes treatment that requires stringent compliance with governmental regulations and wastewater discharge permits.

### Union Pacific and the Land

Union Pacific balances its commitment to transporting goods efficiently with other considerations, including safety, as well as its impact on communities, wildlife and the environment. Ensuring the preservation and resiliency of the land on which we operate helps us as a business and is a priority for the company.

Rail operations can contribute to land and water contamination. Union Pacific actively works to prevent contamination by employing best practices in operations, overseeing lease tenants and proactively working with customers. We also restore land contaminated by prior rail operations. In some cases, Union Pacific works with regulators to go beyond the minimum remediation requirements to further protect the land and waterways.

Among other efforts, we focus on working with tenants to improve environmental conditions of lease sites, addressing land impacts as part of our preparedness initiatives and incorporating soil reuse criteria for construction projects. Rail-owned lands can provide value as community resources, and Union Pacific has helped transition properties for community enjoyment.

Occasionally, Union Pacific donates surplus land to cities, counties, states and non-profit organizations. Often, these lands extend or connect trails in urban and rural areas. Donations in the last two years include land in Missouri and Iowa. Visit our <u>Sustainability and</u> <u>Citizenship Web pages</u> to learn more about how Union Pacific operates in balance with the land around us.

# Compliance

Union Pacific is committed to following applicable laws and regulations in all areas of our operations. From time to time, we are involved in legal proceedings, claims and litigation that occur in connection with our business. For example, we received notices from the U.S. Environmental Protection Agency and state environmental agencies alleging that we are or may be liable under federal or state environmental laws for remediation costs at various sites throughout the United States, including sites on the Superfund National Priorities List or state superfund lists. We cannot predict the ultimate impact of these proceedings and suits because of the number of potentially responsible parties involved, the degree of contamination by various wastes, the scarcity and quality of volumetric data related to many of the sites, and the speculative nature of remediation costs. Where we are found in violation of specific rules or regulations, we seek remedy through the appropriate channels.

# Key Awards and Recognition

- Inbound Logistics' Green Supply Chain Partner
- <u>ShipCarsNow Received the 2014 SmartWay Excellence Award</u>
- <u>Recognized on CDP's Climate Disclosure Leadership Index</u>

# Looking Ahead

### FEEDBACK

For questions on this report or to provide feedback, contact Union Pacific via email at sustainability@up.com.

### **OUR COMMITMENT**

Since our founding more than 150 years ago, Union Pacific has driven economic growth in America. Our mission, strategy and workforce all are focused on completing tasks better tomorrow than we do today, enabling Union Pacific to remain critical to the American economy in the centuries to come. We will continue to strive to be the best in the business in our safety initiatives, on our tracks, in our communities, across our workforce and for our environment. The 2014 Union Pacific Sustainability and Citizenship Report shares our initiatives and progress thus far. We are proud of our accomplishments and our work to improve our operations. In the years ahead, we will continue to invest in our employees, communities and infrastructure because they shape our growth and success.

### ADDITIONAL RESOURCES

For ongoing updates on our citizenship and sustainability efforts, visit www.up.com.

- Media. Up-to-date information about Union Pacific
- Environment. Sustainability commitments and progress
- <u>Employees</u>. Programs and services available to the members of our workforce
- Customers. Product offerings and business groups
- Investors. Annual report, proxy statements and other SEC filings
- <u>Communities</u>. News, photos and video about Union Pacific, our employees and the communities where we operate

### **CAUTIONARY INFORMATION**

Our 2014 Sustainability and Citizenship Report provides additional explanatory information regarding Union Pacific that may not be available, included or directly derived from information in the company's Annual Report. This report includes statements and information regarding future expectations or results of the company that are not historical facts. These statements and information are, or will be, forward looking as defined by the federal securities laws. Forward-looking statements and information can be identified by use of forward-looking terminology (and derivations thereof), such as "believes," "expects," "may," "should," "will," "would," "intends," "plans," "estimates," "anticipates," "projects" and other words or phrases of similar intent. Forward-looking statements and information generally include the following: the company's expectations or forecasts with respect to general economic conditions in the United States and the world; the company's financial and operational performance; increases of the company's earnings; demand for the company's rail service; improving customer service; enhancing profitability; volume and revenue growth; efficiency improvements and increasing returns; and improving asset utilization. Statements also include the effectiveness or growth of new and newer services; management of network volumes; increasing shareholder value; total amount of capital investments; completion and effectiveness of capacity expansion and other capital investments, and other investments in infrastructure improvements; returns on capital investments; improvements regarding safety of our operations and equipment; improving efficiencies in fuel consumption; preserving the environment and communities where the company operates; and effectiveness of plans, programs and initiatives to reduce costs and other efficiency improvements. Forward-looking statements and information should not be read as a guarantee of future performance or results and will not necessarily be accurate indications of the times that, or by which, such performance or results will be achieved. Forward-looking statements and information are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in the statements. Forward-looking statements and information reflect the good faith consideration by management of currently available information and may be based on underlying assumptions believed to be reasonable under the circumstances. However, such information and assumptions (and, therefore, such forward-looking statements and information) are or may be subject to variables or unknown or unforeseeable events or circumstances over which management has little or no influence or control.

The risk factors in Item 1A of the company's <u>Annual Report on Form 10-K</u>, filed Feb. 6, 2015, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in the forward-looking statements and information. This report should be read in consideration of these risk factors. To the extent circumstances require or the company deems it otherwise necessary, the company will update or amend these risk factors in subsequent Annual Reports, periodic reports on Form 10-Q or current reports on Form 8-K. Forward-looking statements speak only as of the date the statement was made. We assume no obligation to update forward-looking information to reflect actual results, changes in assumptions or changes in other factors affecting forward-looking information. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect thereto or with respect to other forward-looking statements.