Going big at Bellevue Yard

REVENUE UNDER THE RAILS
Training First responders

THOROUGHBRED CODE GETS A MAKEOVER
Rail cars roll down the hump and into new classification tracks at Bellevue.
Doubling up at Bellevue Yard

“I can’t tell you how important this is for us. It changes our game in the Midwest.”

– Terry Evans, vice president transportation
Norfolk Southern trains arriving at Bellevue Yard from the east roll by farm fields and red barns before easing under the Route 4 overpass bridge. From the west, they sidle by Bellevue’s small-town Main Street and picturesque two-story brick storefronts.

Since the 1800s, freight trains have coursed through Bellevue, a hub for NS predecessor roads Nickel Plate, Pennsylvania, and Norfolk & Western. Now, this railroad town has a new distinction: It is home to Norfolk Southern’s largest and North America’s second-largest freight car classification yard — only UP’s Bailey Yard in North Platte, Neb., is larger.

With a $160 million investment, NS has nearly doubled the size of a hump yard N&W opened in 1967, positioning Bellevue as a key nexus on the railroad’s busy Northern Region for at least the next generation. The expansion project, launched in spring 2012, added 38 new classification tracks to the yard’s existing 42 tracks and equipped it with a unique capability: It is the only one of NS’ 12 major yards able to classify and sort rail cars from two tracks simultaneously.

Bellevue began humping cars into the expanded yard on Nov. 11, months ahead of schedule — a testament to the planning and teamwork demonstrated by NS’ operations departments.

“We had to keep an old system working while cutting over to a new system,” said Paul Johnson, control system engineer with NS’ Communications & Signals Department. “To be able to keep the existing yard moving with very little delay while constructing a brand new yard in the middle of that was an impressive thing to watch.”

Bellevue’s added capacity is a big deal for NS.

“We can’t tell you how important this is for us — it changes our game in the Midwest,” Terry Evans, vice president transportation, told NS marketing employees during January’s marketing kickoff meeting in Roanoke.

The yard’s management team and employees are enthused about the opportunities.

“We’re swinging for the fence. We know there’s a lot of attention on Bellevue, and the employees here are capable and willing to meet the challenges that the future brings for us.”

— Wil Washington, terminal superintendent
“I feel very fortunate to be a part of this,” said Wil Washington, a 21-year NS veteran who became terminal superintendent in early 2013. “When I think about the SPIRIT values, this project has given me and my team the opportunity to truly live what those values represent — safety, performance, teamwork — all of that.”

Yardmaster Jodi Barber, a Bellevue native, has worked in NS’ Bellevue and Sandusky yards for 17 years. Her father is a retired Bellevue locomotive engineer.

“I think this will bring business and people to Bellevue,” she said. “This is job security for us.”

Trainmaster Bill Krzyzak asked to be transferred to Bellevue from a small flat-switching NS yard in Manassas, Va.

“Bellevue is the largest hump terminal on NS’ system, and I wanted to be a part of something like that,” he said. “There’s a lot riding on Bellevue being successful. We want to be the No. 1 hump terminal in performance, not only in the Northern Region but across the entire network.”

A sweet spot for expansion
Geographically, Bellevue — located about midway between Chicago and New York — is at a “sweet spot” on NS’ network, said John LeStrange, director terminal operations, Network and Service Management. Five NS main lines converge at Bellevue, making it a perfect location to handle freight moving in all directions.

Major east-west destinations out of Bellevue include Chicago, eastern Pennsylvania, and north and south New Jersey. Primary north-south destinations include the Detroit area on into Canada, Knoxville and Chattanooga, Tenn., Birmingham, Ala., and Macon, Ga.

Bellevue’s added capacity offers a win-win for NS and for customers, reducing car handlings, car miles, and transit time — translating into significant cost savings. In one huge benefit, Bellevue will build large blocks of cars that NS can hand off directly to interchange partners BNSF and UP in Chicago, easing congestion in the busy rail hub and shedding costs.

In one example of savings, freight moving from the Philadelphia region to BNSF in Chicago currently is handled at four NS yards — Camden, Conway, Elkhart, and Chicago. With Bellevue’s additional capacity, NS can consolidate traffic there and bypass Conway and Elkhart. That reduces handlings by half and shaves two days of transit time off customers’ freight.

NS trains moving freight from the southeast to UP in Chicago will see similar benefits. Currently, that traffic goes through three NS yards — Chattanooga, Elkhart, and Chicago. That traffic will be diverted to Bellevue and run directly to UP, bypassing Elkhart and reducing transit time by a day.

For NS automotive customers in Detroit, Bellevue is now handling two trains that before were humped in Elkhart, a shift that reduces transit time of automotive parts by 48 hours.

“Bellevue gives us a tremendous amount of flexibility and is going to do nothing but have a positive impact on all of our performance metrics,” LeStrange said. “Once people get used to the place and how it can work, we’re going to see the railroad run as well as it ever has on the Northern Region.”

A spinoff benefit is that the Bellevue plan frees up capacity at Conway and Elkhart and opens the door for new business possibilities. With 72 classification tracks, Elkhart was NS’ largest hump yard before the Bellevue expansion.

“We’re looking at a number of options for things that we could do,” said Gary Shepard, superintendent of the Lake Division.
A place where freight wants to go

Bellevue has become a focal point for NS’ growing energy markets. In particular, energy customers using hydraulic fracturing to drill for natural gas in the Marcellus and Utica shale deposits in Pennsylvania and Ohio have boosted their carloads of sand, pipe, and chemicals. Bellevue also is a major interchange for petroleum products moved by the Wheeling and Lake Erie Railroad, the largest Ohio-based regional railroad. Tanker cars moving through Bellevue carry everything from crude oil and industrial chemicals to corn syrup.

Other freight humped at Bellevue includes steel, auto parts, and a range of general merchandise traffic, from lumber and paper to canned foods. Bellevue handles a large number of multilevel rail cars that move finished autos for Chrysler in Detroit and Toledo, for GM in Ft. Wayne, Ind., and for Honda in Columbus, Ohio.

In addition, Bellevue serves important local customers. Boxcars of potatoes are delivered regularly to Packers, which operates a produce distribution facility at the rail terminal’s western boundary. Bunge, an international agribusiness and food company, operates a nearby soybean processing plant on the yard’s western edge as well. Inbound NS trains move soybeans to the plant, while outbound trains ferry out tanker cars loaded with soybean oils processed at the facility.

Trains handled at Bellevue move appliances, food products, and supplies for nearby manufacturing facilities operated by such recognizable consumer brands as Whirlpool and Heinz, and goods such as plastic pellets for Amcor, one of the world’s largest packaging manufacturers.

“We’re in the position now to handle additional business north-south or east-west on the Northern Region much more efficiently than any of the other Class I railroads,” LeStrange said. “It’s going to put our marketing people in a tremendous competitive position.”
Phasing in the plan

It might be spring before NS fully implements an operating plan that calls for moving 3,000 cars daily over the hump and on to outbound trains. That essentially doubles Bellevue’s pre-expansion humping numbers and leaves room to add future volume as business opportunities arise.

Phasing in the growth will get NS through the worst of winter weather and give employees time to adjust to operations in the larger yard. That includes use of the new computer process control system to hump and classify cars. The new software, supplied by NS vendor Trainyard Tech, must build a history of humping cars to be effective, including gathering and storing information about the “rollability” of specific cars in various wind and weather conditions.

“There are going to be growing pains in a project this big,” LeStrange said. “We wanted to hold off putting too much additional traffic in there until everybody gets real comfortable with the new system.”

The company’s goal is to generate 30-plus outbound trains daily at Bellevue. Consistently hitting that number will take planning, teamwork, and dedicated employees. A little luck also helps. Bad weather, damaged track, and unexpected locomotive failures can upset daily production goals.

Shepard, the Lake Division superintendent, said he is confident that Bellevue employees will deliver — as always.

“We have some outstanding employees who work out of Bellevue,” he said, “and they are very excited to do their part to make the new Bellevue successful.”

Washington, the terminal’s leader, affirmed that commitment. “We didn’t build this facility to get a base hit or a double,” he said. “We’re swinging for the fence. We know there’s a lot of attention on Bellevue, and the employees here are capable and willing to meet the challenges that the future brings for us. ■ BizNS
Building up Bellevue’s Forces

During the past year, Norfolk Southern has been on a hiring spree across northern Ohio to beef up operations at Bellevue Yard.

“We’ve done interviewing sessions at midnight,” said Wil Washington, terminal superintendent. “Expanding the yard, hiring new people, running the operation — it’s been challenging over the past year, to say the least.”

During 2014, Bellevue added more than 160 new employees. The majority, 110, have been conductor trainees, in high demand to handle the yard’s rising freight volume. Working with NS’ Human Resources Department on a workforce diversity initiative, Bellevue formed a Thoroughbred Recruiting Outreach Team — called TROT — that included female operations employees.

“Part of that was to get as many female applicants as possible, and we’ve gotten a really diverse group of new people on board,” Washington said.

NS’ senior management has projected that 275 new jobs will be created by the expansion — a nearly 40 percent increase over the 700 employees who reported to Bellevue before the expansion.

While transportation has had the most hires, mechanical and engineering forces are growing as well.

More cars + locomotives = more mechanical work

During 2014, the Mechanical Department added 10 new employees on the locomotive side with plans to hire at least 17 more in 2015. The hires include machinists, electricians, firemen-oilers, and storehouse clerks, said Asa Smith, manager Bellevue Locomotive Shop.

In addition to maintaining and repairing more locomotives, local mechanical crews are playing another role to improve yard traffic flow. After servicing locomotives, they now have yard space to build more locomotive consists for outbound trains. With consists ready to go, road train and engine crews reporting for duty simply board the consist, couple up to their train, and depart the yard.

“We’ve done a lot of problem solving with transportation on how we can add value to our overall system operations,” Smith said. “It allows mechanical to service our customer, which is transportation, with more urgency, and that translates into better service for our freight customers.”

TOP: Machinist Dan Duckles changes oil filters in an SD40-2 locomotive engine.
MIDDLE: Yardmaster Jessica Mosley coordinates the work of conductors at the hump.
BOTTOM: Carmen Eric Frost, left, and John Perry work on the coupler of a multilevel auto car.
In another step to reduce delays, mechanical has added electricians to fuel pad crews to improve troubleshooting of inbound engines. “The goal is to find out everything we need to know before a locomotive goes to the shop – that way, we can make sure there’s a spot for it, that we have the people available to work it, and that we have the material needed to repair it,” Smith said. “The end result is to get the locomotives back to our customer in a more timely fashion.”

On the rail car side of mechanical, the department added 16 carmen in 2014 to expand car inspection and repair capabilities, said Jim Roskovics, senior general foreman of Bellevue Car Shop. As part of the expansion, mechanical constructed office and storage buildings to support inspection operations and a new repair track to expedite work on cars needing only light repairs.

To streamline the traffic flow, carmen now conduct inspections on inbound trains, a change from the previous practice of inspecting cars after they were humped into the yard. Identifying cars in need of repairs before they go over the hump avoids delays in moving them out of the class yard or from blocks of cars on outbound trains.

“It’s a culture change for a lot of people,” Roskovics said, “but our employees are onboard and excited about the opportunities.”

C&S doubles in size
The Engineering Department’s communications and signals group has added about 10 signal maintainers, essentially doubling Bellevue’s C&S staff, said Rob Leck, supervisor C&S.

Leck oversees the “brains” of Bellevue yard – the computerized process control system used to hump and sort cars into classification tracks. The automated system records every car humped at the yard, including commodity, weight, and roll speed.

With 162 new automated power switches, more than 145 miles of new underground cable to support signals, and eight miles of main-line track, Leck’s forces stay busy.

“That everything comes back to our department one way or the other,” Leck said. “We get called for about 99 percent of everything that happens in this yard.”

Leck, with five years at NS, moved to Bellevue in August 2013 from Pittsburgh. “To be involved in a project like this is a very big deal. I probably won’t see another project on this kind of scale in my career, and I’ve still got 34 years to go,” he said, laughing.
Some employees call Bellevue Yard the windiest place in the world. To combat prevailing westerly winds that sometimes disrupt humping activity, NS has hired an environment-control firm to install wind fences at the yard.

The durable fabric fences will rise 24 to 48 feet above the rail surface. The company assures NS that the fences will knock down wind speed by 50 percent, reducing a 30 mph wind to 15 mph at the hump.

It will be the first time a railroad has tried using fences to block wind in a hump yard, said John LeStrange, director terminal operations.

“We hump right into the prevailing wind at Bellevue, and there are days when the wind will blow cars backwards out of a class track,” LeStrange said. “You have to stop humping and send an engine to push them into the clear. These fences will dissipate the wind coming up toward the hump, and they should remove wind as a factor.”

The fence designer used computer simulation models of the yard to determine such things as the number of fences needed, where to place them, and fabric design. LeStrange said the fences should be installed around March. Fence poles will be secured in steel-reinforced concrete in 15-foot-deep holes about 4-feet in diameter.

Before the expansion, track crews worked a Monday-Friday week, with a supervisor on weekend call. The new crew, comprised of laborers and a supervisor, works a Saturday-Wednesday schedule.

The expansion added 38.5 miles of track, including yard classification tracks and main-line track, and 149 track turnouts.

“It essentially doubles your walking track inspections, doubles your small maintenance items, and doubles your chances for major maintenance items,” Adams said.

A plus comes with having two hump tracks instead of one: Track maintenance crews now can get track time to maintain the hump without halting operations. If the north hump track needs maintenance, transportation can hump cars over the south track to keep rail cars flowing, and vice versa.

“Transportation can continue to operate and we can still have a hump outage,” Adams said. “It gives us a chance to co-exist, really.”

NS’ Engineering Department oversaw design and construction of Bellevue’s expansion, which included adding 39 miles of new track.
When it comes to getting rail cars over the hump and onto outbound trains, yardmasters at Bellevue Yard do everything by the numbers. Incoming rail cars are assigned classification codes — cars destined for Lafayette, Ind., for example, are “2s” — and yardmasters often do quick calculations to ensure that cars headed to the same destination will fit on a particular class track.

So maybe it’s no surprise that yardmaster Jessica Mosley was a former high school math teacher, or that yardmaster Joe Schettine was planning to teach math before joining the railroad three years ago.

Mosley, who hired on as a conductor in 2007, works in the yard’s Route 4 Tower, a four-story command center that overlooks the hump — a hill where inbound rail cars are scanned and then sorted into class tracks. Perched at a console packed screen-to-screen with computer monitors, she coordinates the work of conductors who shove blocks of cars up the hill and then cut cars loose at the top of the hump. The cars roll into class tracks Mosley assigned them based on their destination code — in January, yardmasters had 60 destination codes to work with, up from 43 before the expansion.

Schettine works on the yard’s opposite end in the Ranger Tower, where he overlooks conductors who pull blocks of cars from the class tracks to build outbound trains. He monitors a bank of computers he uses to coordinate the work flow of up to five “pullback” crews on his shift.

On each of three daily shifts, the Route 4 and Ranger tower yardmasters share responsibility for hitting an important number at the expanded yard — the total count of cars that are processed and sent on the road each day to customers.

“Everybody up here appreciates that Norfolk Southern took a special interest in us and felt confident enough in Bellevue to put the time and the money into expanding the yard.”

— Jessica Mosley, hump yardmaster

For Bellevue yardmasters, the numbers add up

Yardmaster Jessica Mosley works in the Route 4 tower, a four-story command center that overlooks the hump at Bellevue Yard.
In this task, a simple rule of physics applies: You can put in only as many cars as you can pull out of the terminal’s two classification yards, known as “bowls.” Two trains can be humped simultaneously – the yard’s major new capability – only if there’s enough room in the bowls for the cars.

“It’s like putting a puzzle piece together, which I like – it’s a challenge,” said Mosley, who grew up and still lives in Willard, Ohio, a 20-minute drive from Bellevue. “I work with the Ranger Tower yardmaster so it’s easier and faster for the pullback crews to get cars out of the bowls. We work as a team to make sure we’re not in each other’s way.”

As car volumes ramp up, employees have experimented to find the most efficient ways to increase daily production. Since mid-November, yardmasters have been humping cars into the terminal’s 38 new class tracks – known as the south bowl. The existing north bowl has 42 tracks, including two used for quick repairs of rail cars. Each of the class tracks holds anywhere from 22 to 50 cars.

“We’ve been working out kinks to get the system running smoothly,” said Schettine. “We’re finding ways to get the crews lined up so that they can work efficiently and make their moves count.”

The expansion project supplied Bellevue yardmasters and conductors with a variety of efficiency gains. Most of the yard’s manual track switches, for example, were replaced by power switches, which are controlled automatically by a computerized process control system and boost yard productivity.

“I can very easily get outbound trains onto their power without the conductors having to throw any switches – that takes at least five to 10 minutes out of every move,” Schettine said.

Traffic fluidity improves noticeably when the yard is able to move two trains simultaneously over the hump, Mosley said.

“We do that as often as we can,” she said. “We can clear off two tracks in our receiving yard in the same time it used to take us to do one track. That means we’re able to yard more traffic.”

The process control system that yardmasters use to automate humping operations features a software upgrade that has made the system more responsive.

As of mid-January, Mosley’s best shift for car counts over the hump since the expansion was about 940 cars. That’s close to the 1,000 to 1,200 cars per shift that NS eventually hopes to move daily through Bellevue.

“They could’ve built us a third bowl, and we would still keep packing them in – that’s how busy we’ve gotten, which is great,” Mosley said. “Everybody up here appreciates that Norfolk Southern took a special interest in us and felt confident enough in Bellevue to put the time and the money into expanding the yard.”

Schettine, who grew up in nearby Elmore, Ohio, and now lives in Bellevue, echoed her sentiments. “Norfolk Southern is giving back to the community by giving people careers and just providing for the town,” he said. “I think becoming one of the biggest rail hubs in America right here in Bellevue is impressive. It’s very rewarding to come in and do a good job and have a part in helping Norfolk Southern continue to progress.”
Walking the ‘hill:’
On the Front lines of expansion

Perry Brown arrives at Bellevue Yard before sunrise with one main task:
To safely move as many rail cars as he can “over the hill.”
“That’s what they pay me to do, and I want to keep them happy,” said Brown, a first-shift conductor foreman.

Brown works atop the yard’s 31-foot high earthen hump and is on the front lines of Bellevue’s expansion. Using a remote control device strapped over his chest, Brown pulls blocks of cars out of the receiving yard, shoves them up the hump, and “cuts” them loose at the crest, letting gravity carry them down into a sprawling network of classification tracks to be assembled into outbound trains.

On an early December day, Brown warded off westerly winds of 15-20 mph and a wind chill in the 20s wearing a hooded pullover, cap, gloves, jeans, and steel-toed boots.

“I’m still trying to get used to the new bowl,” Brown said, referring to the yard’s 38 new “class” tracks, which resemble an elongated bowl. Employees refer to the new class tracks as the south bowl and the yard’s original 42 tracks as the north bowl. When humping a single train, he can cut cars for both bowls.
“On a windy day like this, if I’ve got an empty going into the south bowl, I run in hump slow,” he said, the slowest of three speeds on the remote control unit. This allows more time to stop cars moving up the hump if a wind gust stalls a released car before it rolls clear into a class track. “You’ve got to use your head and watch what’s going on.”

He worked rhythmically, walking alongside the rail cars as he moved them up the hill. At the right moment near the crest, he reached over and pulled up on a car’s cut lever, a steel rod that releases a pin in the coupling knuckle, allowing the car to roll free. Over and over, he repeated the task, 14 steps up and 14 steps back.

While working, Brown monitored two digital “hump boards.” The boards identify cars moving up the hump by number, whether they are empty or loaded, and where to cut the cars – either individually or up to five coupled together. Flashing lights beside a car number mean it is loaded with material considered hazardous under federal rules, including crude oil and certain chemicals.

When two trains are humped simultaneously, a new capability with the expansion, two conductors work side by side. One cuts cars into the north bowl, the other into the south bowl. Together, they will be able to hump up to about 300 cars an hour – about twice as many as before.

“I say bring them on,” Brown said. “This is the most money I’ve ever made, and for the work they ask me to do, I’ll do this all day long.”

A native of Monroe County, Ohio, four hours southeast of Bellevue, Brown hired on with NS about 12 years ago. He met his wife, Bellevue yardmaster Meaghann Brown, at the yard, and is the proud father of a 2½-year-old daughter. He spoke enthusiastically about the yard expansion and Bellevue’s elevated role as a central hub of NS’ rail network.

“I love it. It’s job security,” said Brown, echoing a sentiment common among Bellevue employees. “It shows the company is putting a lot of trust in us and relying on us. That’s why I want to keep the cars moving.”

ABOVE: Conductor Perry Brown walks cars over the hill.

BELOW: Digital boards on the hump provide conductors with rail car information, including car numbers, which cars are empty and loaded, and whether cars should be cut individually or in groups.
Brandi Oney considers herself a beneficiary of the Bellevue yard expansion. She hired on last year as a conductor trainee, leaving a job as a tow motor operator at an Ohio plastics company.

“I heard the railroad here was a good career – good pay, good benefits,” said Oney, who grew up less than an hour from Bellevue and now lives in Freemont – a 25-minute drive from the yard. “It’s been a great opportunity for people around here. I’m making more money now, and I don’t have to worry about all the day-to-day things like I did before.”

Since promoted to conductor, Oney has been working a second-shift “pullback” crew – a yard job that involves coupling and pulling blocks of rail cars out of the yard’s classification tracks to build outbound trains.

On an early December day, Willie Mullens, a Bellevue trainmaster, accompanied Oney at the start of a shift to evaluate her readiness to be certified as a remote control operator, or RCO. This would allow her to operate a remote control locomotive unassisted. They began in the cab of an SD40-2 yard locomotive, where she ran engine tests and inspected equipment before powering it up to couple and pull out a block of rail cars that would form the rear of an outbound train.

With a remote control device strapped over her chest, Oney, joined by Mullens and veteran conductor Laurie Montgomery, dismounted the locomotive and set out on foot to “tie a track.” That is yard speak for a task that involves walking a classification track to ensure that rail cars on it are coupled securely.
As the three railroaders walked down a narrow space between two class tracks and towering rail cars, they encountered several multilevel auto cars that had failed to couple after rolling down the hump onto the track. The cars’ drawbars—70- to 80-pound metal bars that extend from each end of the cars and house the couplers—had skewed to one side after hitting and failing to latch.

To couple them, Oney moved the cars apart with the locomotive RC unit to give herself a safe space to work. Then, stepping onto the track, she positioned her back against one of the car’s drawbar, planted her feet, and pushed back. If the drawbars are greased properly, moving them with her legs and back, as trained, is no issue, Oney said. Carmen equipped with drawbar straps are called in to move stubborn ones.

After realigning the drawbars and moving off the track, she brought the cars together using the RC unit. After coupling them, she used the RC to “stretch the track,” taking slack out of the line of cars to ensure the coupling was locked in place.

“You get your exercise in this job,” Oney said after completing the task. After hiring on, she signed up for Virgin HealthMiles, a company wellness program that enables employees to earn up to $500 a year for walking and other healthy behaviors. During an eight-hour shift walking the class tracks, Oney said she averages 8,000 to 10,000 steps—about 3.5 to 5 miles.

“I put on my WellNS pedometer and make money,” Oney said, grinning. “You can’t beat getting money for walking, right?”

After successfully tying the track, Oney met briefly with Mullens to discuss her performance. Mullens, an 18-year NS veteran, had positive things to say, pointing out specific actions she had taken to do her job safely and efficiently.

“Keep up the good work,” he said. Then he added, “I’m going to recommend you for promotion to RCO.”

“Awesome!” Oney said.
15-YEAR-OLD VISION STARTS TO PAY OFF

NS’ T-Cubed subsidiary finding revenue under the rails

When it was launched in 1999, Norfolk Southern subsidiary T-Cubed had a lot going for it: a catchy name, a smart leader who later would become CEO, and thousands of miles of potential business opportunity.

With Wick Moorman as president, Thoroughbred Technology and Telecommunications, Inc. had ambitious plans: To turn the underused rights of way along NS’ tracks into a revenue-generating information highway. In entrepreneurial fashion, T-Cubed intended to install and lease underground conduits to rapidly growing telephone, cable television, and Internet providers seeking locations to install fiber-optic telecommunications cables.

Starting with a flourish, T-Cubed buried groups of eight to 12 fiber-optic conduits along approximately 1,500 miles of track rights of way. Then, in early 2001, with T-Cubed poised to prosper, the telecom industry boom went bust.

Fortunately, that was not the end of T-Cubed’s story. Moorman survived the world of telecom to become the chief executive of a thriving NS, and, thanks to demand from a resurgent telecommunications industry, the early investments T-Cubed made are starting to pay off.

“We only had a toe in the water, not the whole body, so NS was not hurt very much by the telecom bust,” said John Friedmann, vice president strategic planning and T-Cubed’s president since early 2009.
Fundamentals remain sound

What Friedmann describes as T-Cubed’s long, quiet period has given way to increasing bursts of activity. As deregulation of the telecommunications industry continues to unfold, telecom companies large and small are looking for efficient ways to expand offerings for voice, data, video, and cable transmission. Today, T-Cubed has active agreements with about 24 customers, including many brand-name telecom companies, to use the previously installed underground conduits.

“Fiber-optic infrastructure needs to be renewed,” Friedmann explained, “and when it needs to be renewed, people want to put in bigger, newer cable. In the same way that people aren’t using the same cellphone they had in 2000, telecom companies aren’t using the same fiber-optic cable, and the demand for bandwidth has increased – particularly as we’ve seen growth in mobile applications for smartphones and other handheld devices.”

Customers, who typically sign long-term agreements for use of the conduits, like the ease of doing business with T-Cubed, Friedmann said.

“If you’re trying to run fiber-optic cable over hundreds of miles and have the choice of dealing with a single landlord or hundreds or thousands of individual landowners, you’ll choose the first option,” he said. “If the landlord happens to have a conduit in the ground, life gets even easier.”

Although all railroads lease rights of way to telecommunications companies, NS is one of the few major railroads to build and market its own fiber-optic conduits.

“Every day, people see the revenue that rolls along on top of our rails, but what they don’t realize is that underneath our tracks, we’re making money, too,” Friedmann said. “The revenue T-Cubed brings in is an added benefit and doesn’t interfere with the railroad’s principal business of hauling freight.”

Along with revenue from lease contracts, NS often obtains the rights to use strands of fiber-optic cable installed by T-Cubed customers. The railroad’s communications and signals and information technology departments, for example, can use the fiber to strengthen the railroad’s signals and telecommunications networks.

An East Coast connector

T-Cubed’s profit margins have been growing the past five years, said Chip Meador, director strategic planning and current T-Cubed vice president.

“We sat on those assets in the ground for almost a decade, and now customers are coming back to us,” Meador said.

One pivotal deal in T-Cubed’s turnaround involved a lease agreement in mid-2009 with Ridgeland, Miss.-based Spread Networks. The private telecommunications company used T-Cubed conduit and NS rights of way as part of a high-speed fiber-optic cable network introduced in 2010 to connect Chicago and New York. The project, designed to offer faster communication links for Wall Street traders, is featured in the 2014 New York Times bestseller “Flash Boys.”

“That transaction was the first of many that reinvigorated T-Cubed,” Meador said.

After launch 15 years ago, T-Cubed installed conduits in areas of high projected demand, including from Washington, D.C., to Chicago, and from Chattanooga, Tenn., to Jacksonville, Fla. Made of PVC pipes, the conduits are buried at least 3½ feet underground.

“Now, we’re focusing on putting those assets to work instead of spending a lot of money on new conduits,” Meador said. “As long as you don’t disturb them, they’re in fine shape to be utilized.”

Where conduits have not been installed, customers, such as Spread Networks, can use NS’ rights of way to install their own conduits, also known as ducts. In its conduits between Chattanooga and Atlanta, T-Cubed owns and leases “dark” fiber-optic cable—an industry term to describe cable before it is activated by a telecom provider. However, T-Cubed does not offer telecommunication services.
“You’ll never get a dial tone from T-Cubed,” Friedmann said.

In 2014, Allied Fiber, a dark fiber provider, signed a contract with T-Cubed to lease conduits between Atlanta and Jacksonville, Fla. Based in New York, the six-year-old company aims to build a new open-access communications infrastructure across the nation, allowing any network operator to connect and enhance its network. That goal would be impossible without contiguous rights of way, said Jason Cohen, Allied Fiber’s chief operating officer.

“Allied Fiber has mapped out a plan for the entire East Coast utilizing Norfolk Southern and T-Cubed rights of way and duct,” Cohen said. “Allied Fiber will use the ducts to install a new fiber-optic cable system while building co-location facilities along the rail network. By using the NS right of way and the existing T-Cubed ducts, Allied Fiber will complete the approximately 390-mile network from Jacksonville to Atlanta by mid-2015.”

T-Cubed’s conduits offer Allied Fiber the most direct, secure path between Jacksonville and Atlanta, Cohen said.

“Because the T-Cubed ducts are already installed, it eliminates one of the largest construction risks for a long-haul fiber project,” he said. “Once the duct is in the ground, running the fiber-optic cable through it is fairly straightforward, and working with a single landlord for the entire route is priceless.”

Although T-Cubed’s fortunes are improving, Friedmann and Meador cautioned that the subsidiary is unlikely to be material to NS’ overall financial performance.

“The revenues T-Cubed brings in are an added benefit, but it’s a small business compared to the rest of NS’ business,” Friedmann said. “It’s not going to be a main driver of NS’ fortunes, but we’re glad to help.” ■ BizNS
WATCH OUT FOR RATTLESNAKES!

NS and the industry enhance emergency response preparedness

To say that the rail industry’s premier training center is in the middle of nowhere is an understatement: Driving east from Pueblo, Colo., it’s 25 miles across desolate flatlands, past the U.S. Army Pueblo Chemical Depot, where mustard gas is stored; past prairie dogs and pronghorn antelope; and past a security checkpoint with a huge warning sign for rattlesnakes.

Since last summer, Norfolk Southern and other Class I railroads have converged on the remote Security and Emergency Response Training Center to help train community emergency responders on how to safely respond to the derailment of a train moving crude oil tankers. The railroad-sponsored training was prompted by a dramatic increase of crude-by-rail transport and several highly publicized derailments — including the July 2013 explosion of a runaway crude train in Lac-Mégantic, Quebec, that killed 47 people and destroyed much of the downtown area.

As part of an industry initiative to address concerns, the Class I roads, including NS, committed $5 million to develop a three-day, 24-hour training course on crude-by-rail emergency response at the SERTC facility. The Transportation Technology Center Inc., a subsidiary of the Association of American Railroads, operates the center. The Class I roads are paying for 1,500 first responders to attend the class.
“There have been numerous initiatives over the past two years to address the increased volumes of crude oil traveling on the nation’s railways, including regulatory rulemakings, emergency orders, and voluntary programs,” said Rich Russell, NS system director environmental protection. “The SERTC crude-by-rail training course was part of a voluntary commitment to the U.S. Department of Transportation. It provides a unique hands-on learning environment for emergency responders, and it plays an important part in the rail industry’s larger local community preparedness programs.”

NS’ hazardous materials and environmental operations groups enhance preparedness by developing and offering training programs for NS employees and local emergency responders. Collectively, these NS groups trained more than 5,000 responders across the company’s service network in 2014. They also are on call to provide emergency response duty at any time.

At three of the SERTC training courses last year, NS sponsored 126 first responders from 11 states, primarily along the company’s crude oil corridors, providing tuition, travel, and expenses. The participants included fire chiefs, paramedics, homeland security officials, hazardous materials officers, and others from Pennsylvania, Ohio, Delaware, Illinois, Indiana, New York, New Jersey, Virginia, Maryland, Alabama, and Kentucky. In 2015, NS plans to offer the three-day training class to 80 more emergency responders across its rail network in June.

NS attendees and facilitators of the training included David Schoendorfer, manager hazardous materials; Robert Wood, hazardous materials compliance officer, Atlanta; Chad Edwards, manager fire and life safety, Atlanta; Joe Taylor, hazardous materials compliance officer, Harrisburg, Pa.; Bob Scoble, environmental operations engineer, Bellevue, Ohio; and Bill Oertly, hazardous materials compliance officer, Roanoke, Va., who retired in September.

“We understand that the risks associated with transporting crude-by-rail are a very real concern for many communities,” Schoendorfer said. “Norfolk Southern takes its responsibility to safely ship crude oil, as mandated by federal law, very seriously. We want to ensure that first responders along crude corridors have the very best training possible, so that in the rare event of an incident, they are prepared.”

Taylor and Scoble, who hired on with NS last year, said the training sessions provided a chance to network and build relationships with emergency responders on their territories. They noted that 30 percent of the participants came from Pennsylvania, while 25 percent were from Ohio communities.

“The training gives first responders an opportunity not only to become familiar with response protocol for dealing with rail cars containing crude oil, but also how to work safely in a railroad environment.” Wood said.

Classroom and hands-on training included chemical and physical properties of the different crude oil transported, basic site and damage assessment, tank car design and construction, planning for crude oil incidents, and working with the railroad.

A derailed train consisting of 20 tank cars stays in place on the SERTC property for training that simulates real-life rail scenarios. The setting is equipped with underground pumps that, with the touch of a button, ignite a fire, shoot water from a car to simulate a spilled product, or release steam to simulate escaping vapors. Participants also practice using specialized response techniques, including firefighting foam agents and spill control procedures.

Located on a 52-square-mile fenced site, the center’s isolation makes it an ideal spot for simulating explosions, fires, and train derailments.

“This is top-notch,” said Jason Hudgens, a firefighter and paramedic from Akron, Ohio, who attended one of NS’ summer sessions that included a fire to simulate a tanker car derailment. “We could feel the heat and use the hoses to spray foam. You can’t do that in a classroom. You can’t do this anywhere else.”

— Jason Hudgens, Firefighter and paramedic, Akron, Ohio
Norfolk Southern’s Thoroughbred Code of Ethics has a new look, but the purpose of this “old friend” remains the same: To outline the company’s high standards of business conduct – and provide a guide to help employees make the right decisions.

Employees soon will receive the updated code in the mail. Every NS employee – agreement and nonagreement, entry level to senior executive – has a responsibility to read and know what is in the code, said Wayne Lockwood, NS director ethics compliance.

“Our Thoroughbred Code of Ethics is important because it sets the ethical tone of how we get our jobs done every day,” Lockwood said. “It’s about integrity and respect in how we treat each other in the workplace, in how we treat our customers, and in how we treat suppliers, contractors, and even competitors.”

Typically updated every two to three years, the code is both a valuable work tool and a resource for employees to use if they have questions or concerns about issues that arise on the job, Lockwood said. The most significant content update is the addition of a section on inclusion, which is a key component of NS’ workplace diversity policies, Lockwood said.

“The diversity and inclusion effort is partially about how we treat each other and work together,” he said. “As a company we’re making great strides in that area.”

Another update is the addition of a “SPIRIT” key that highlights which of the company’s SPIRIT values – safety, performance, integrity, respect, innovation, teamwork – are best represented within each section of the code. There’s also a new message from CEO Wick Moorman, who reminds employees that protecting the company’s good name means more than just doing the right thing: “It’s about upholding the core values that make us proud to say we work here.”

Most of the other changes in the update reflect efforts to improve the code’s readability and make it more visually engaging. The update, for instance, is packed with photos of employees at work. In addition, colorful graphics and design by NS’ creative services team draw attention to key information.

Employees can protect themselves and the company by using the code. Every year, Lockwood said, NS investigates possible ethics violations involving such things as misuse of company assets and fraud involving company credit cards, payroll, and suppliers.
In June 1929, more than 100 African American employees of the Norfolk and Western Railway’s Bluefield, W. Va., shops gathered for a photograph on steam locomotive 564, a class E-2 engine built in 1910 at the Richmond works of the American Locomotive Company. At the time, N&W was Bluefield’s largest employer, and the majority of the black railroaders were locomotive roundhouse and shop laborers.

A new book, “African American Railroad Workers of Roanoke,” features this photograph on its cover. The book, published in late 2014, is the product of an oral history project undertaken by the Roanoke, Va.-based African American Norfolk and Western Heritage Group. The group was founded in 1996 by 15 members who retired before 1970, with a combined 170 years of railroad service. A partnership among the Norfolk Southern Historical Collection, the Virginia Museum of Transportation, and the Historical Society of Western Virginia — along with grant funding from the Virginia Foundation for the Humanities — helped to document their stories. A new exhibit at the Virginia Museum of Transportation, opening in February, highlights their pivotal roles.

African American employment on U.S. railroads dates to the antebellum era. After the Civil War, N&W employed blacks in many positions, although not initially as engineers or conductors. African Americans worked as brakemen, firemen, porters, chefs, mechanics, and track laborers, making significant contributions to the building, maintenance, and operation of the railroad. Rail gangs used hand tools, such as pick axes and shovels, to repair and replace track. Porters worked at rail passenger stations, and kitchen staff and waiters prepared and served meals on trains.

“No matter how difficult the job,” N&W President Arthur C. Needles asserted in 1930, African American workers “always tackled and conquered it.”

Photographs, archival materials, and oral histories compiled by the Roanoke N&W heritage group help preserve their stories — as well as the railroad’s story — for future generations.

— Jennifer McDaid, NS historical archivist
Meet GeneratioNS

First came WiNS, then YoungNS, and then VeteraNS. Now there is GeneratioNS, Norfolk Southern’s newest employee resource group.

Open to all employees, GeneratioNS – aka GenNS – has a core focus on long-serving employees, and the hope is eventually to draw in NS retirees as well, said Marc Orton, director visual communications, a 20-year employee who chairs the group’s leadership council.

A primary mission of the group, which launched in Norfolk, is to give NS a competitive advantage by fostering professional development and the sharing of institutional knowledge and best practices, Orton said. For example, Orton is planning upcoming GenNS events to include members of WiNS, a networking group with a focus on female employees, and YoungNS, a group with a focus on young professionals at NS.

“This is an avenue for long-serving employees to share their knowledge and experience and an opportunity to promote networking across all generations at Norfolk Southern,” Orton said. It’s also a venue for informational sessions on issues that matter to older employees, he said.

The group’s first lunch-and-learn focused on Healthy Habits and included a visit by representatives from Whole Foods and a regional hospital. An upcoming session will focus on finances, including investing and planning for retirement.

As of mid-January, the Norfolk group had nearly 120 members, with Jeff Heller, vice president intermodal and automotive marketing, serving as the group’s executive sponsor. Eventually, Orton hopes other work locations across the network will adopt a GenNS chapter. He also hopes that GeneratioNS will become a venue for the company to remain connected to retirees.

“When someone retires, all their experience and valuable information leaves the building,” Orton said. “If we can find a way to interact regularly with retirees, we have an opportunity to pass along all that knowledge. GeneratioNS could help keep them within earshot of the company.”

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