

Spring 2025

CRANEMASTERS®

On The Rails

Rail Support Services News and Insights from Cranemasters

The Skilled Workers Issue

- Find the Skilled Railroad Workers You Need
- Move Your Career Ahead in Railroad Services
- Railroad Operations Physical and Cyber Security
- Cranemasters Case Study: Cranemasters Brings Quiet to the Neighborhood

CRANEMASTERS

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Cranemasters Strategic Systems Operations™

Customers choose Cranemasters for our innovations in railroad technology. We simply have the tools necessary for today's railroad work with larger cars and heavier loads. But they also point out the difference in how our crews operate.

We've developed a holistic, strategic approach, emphasizing safety and efficiency in everything we do. As a result,

we can preserve loads, save assets, and protect crews while minimizing downtime, and saving our customers' bottom line down the line.

Cranemasters Strategic Systems Operations™ is our proprietary project management process. It streamlines a systematic evaluation and management for each project. It prioritizes the stakeholders'

business objectives. This involves considering the consequences for the railroad, car owners, and load owners as well as applicable federal, state, county, and local requirements. The best strategy is developed while consulting with our customers. Every job is engineered to advance safety, remove hazards, and deliver the best possible outcomes.

CRANEMASTERS®
RAILROAD EMERGENCY AND CONSTRUCTION SERVICES

800-624-0543 info@cranemasters.com www.cranemasters.com

Cranemasters Railroad Services:

- Emergency Derailment
- Track Construction & Repair
- Railcar Maintenance & Repair
- Design & Manufacturing
- Load Adjustment & Transfer
- Natural Disaster Response
- Heavy Equipment Recovery
- Complex Track Panel Installation
- Bridge Span Replacement

Cranemasters is a full-service railroad contractor uniquely equipped to work with all Class I, regional, and short-line railroads, and rail-connected private industrial siding operations. Since its inception, the company has charted a steady course of growth and innovation, offering expert railroad construction and emergency services. The company's success is rooted in a steadfast commitment to excellence, encapsulated in a "no shortcuts" philosophy that permeates throughout its talented and experienced employees. Cranemasters is the industry's leading manufacturer of purpose-built railroad heavy-lift equipment and developer of safe and efficient processes for the industry's toughest challenges.

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Find the Skilled Railroad Workers You Need

Spring 2025 | Paul Maurer

Generally, railroad companies schedule track construction and preventative repairs for the spring and summer. As these capital projects pick up, there's an increase in demand for skilled workers.

There are still too few skilled workers in the industry. Of the categories of employees of Class 1 freight railroads, 'Train and engine' is the largest category. 'Maintenance of way and structure' and 'maintenance of equipment and storage' are the next two largest categories, followed by 'professional and administrative' employees, 'executive' employees, and 'other transportation' employees. As of November 2024, employment in all categories is less than in 2017, especially the three that rely on skilled labor, according to the Federal Railroad Administration.

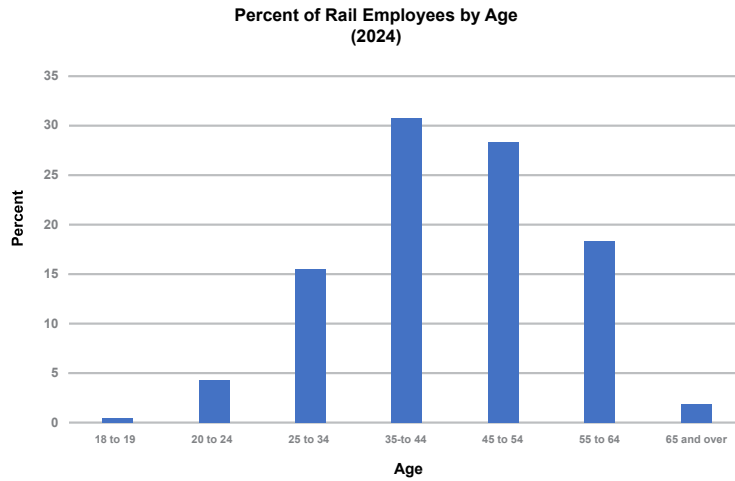
Most of these unfilled railroad jobs arise from the need to replace skilled workers who have retired or changed occupations. This poses a dilemma since not enough young people are entering the trades. For every five baby boomers that retire, only two candidates of a younger generation enter a skilled-trade occupation. Consequently, there are an estimated 500,000 more skilled trades jobs than workers to fill those roles.

For a railroad industry looking to modernize, the recruitment crisis among 18- to 34-year-old workers couldn't happen at a worse time. Shortages of skilled



workers can be incredibly disruptive to railroad operations. It can create delays from coast to coast due to the interconnectedness of rail networks, even when a shortage exists in only one region. Finally, with an increasing reliance on sophisticated railroad technology and automation, there's a growing need for workers with the ability to learn, use, and maintain these new technologies. The industry's ability to adapt and grow is limited without enough people with these technical skills.

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The Railroad Retirement Act allows railroad workers with at least 10 years of service to retire at age 60. However, as the baby boomer generation ages, railroads face challenges finding qualified workers. [Source: https://www.bls.gov/cps/cpsaat18b.htm](https://www.bls.gov/cps/cpsaat18b.htm)

Casting a wide net for X, Y, and Z

Working in railroads as a career option was one of the best-kept secrets. However, with the looming shortage, recruitment ads are beginning to appear everywhere. Some Class 1 railroads have adopted a practice of hiring continuously to create a more balanced mix of age and tenure. Since each generation has its perceptions and values, they are not motivated by the same things. Fortunately, much about the railway industry can appeal to the next generation of skilled workers.

most influential factor in selecting and staying in a job. With Gen X, salary is essential, along with stability and a place where they can succeed. Baby Boomers.



The railroad industry provides competitive pay and benefits. Just don't expect it to be an 8 to 5 office job.

Training, Supervision, Feedback

Gen Z is the most recent generation to enter the workforce. They want to invest in a company that will invest in them, with 84 percent of those surveyed expecting their employer to provide formal training and constant feedback. While Millennials are more apt to jump from one company to another for higher pay, they thrive when there's structure, continued learning, and skills training with feedback.

	Era	Ages (years)	Size
Generation Z / Zoomers	1997 – 2012	13–28	86,391,289
Generation Y / Millennials	1981 – 1996	29–44	83,545,955
Generation X	1965 – 1980	45–60	49,151,059
Baby Boomers	1946 – 1964	61–79	74,102,309

[Source: https://genhq.com/large-generation-us/](https://genhq.com/large-generation-us/)

Salary and Benefits

Gen Z workers are the least motivated by salary but expect a competitive salary and will compare theirs with others on social media. On the other hand, surveyed Millennials rank base pay as the

Gen Xers prefer to work independently and make their own choices with little supervision, but they are most engaged in learning and becoming experts in their field, so they appreciate training and workshops. Boomers don't require constant feedback. They'll assume everything is okay unless something is said.



While a college education is not necessary to have a career in the railroad industry, working in the industry requires specialized skills and knowledge. Railroads provide extensive on-the-job training along with internships and apprenticeships. Afterward, there are opportunities for advancement with additional certifications, continuing education, and sometimes professional mentoring.

Transferring know-how

Brian and Barry Isringhausen, co-founders of Cranemasters, fully appreciate the value of hands-on experience with a mentor. Their childhood immersion in the railroad industry involved accompanying their father on train derailments. This experience, which began a lifetime of learning, equipped them to grow Cranemasters into one of the most innovative and responsive rail contracting businesses.

Recognizing that “knowledge transfer” is mission-critical for employers and employees, Cranemasters developed a proprietary project management system. It is designed to ensure that everyone follows the best practices and procedures for handling some of the rail industry’s most challenging jobs. Optimizing safety and efficiency throughout the company’s field operations ensures the continuity of excellence in a business with unpredictable variables.

Corporate Culture & Recognition

Gen Zers want more than a job; they want purpose and authenticity and are motivated by social rewards. Millennials want a place to work where they can collaborate with others. Gen Xers are content working independently and believe promotions should be based on merit, not seniority.



Gen Z is the first generation born into a tech-centric world, and Millennials are also very tech-oriented. Both can appreciate having a role in sustaining the

American economy and way of life and how important it is to modernize the railroad industry. They also expressed the desire to work in an environment involving communication, teamwork, and a sense of camaraderie. For those concerned with the environment, generations concerned with the environment will appreciate the green aspect of railroad transit.

Work-life Balance

Baby boomers are known for being goal-oriented and career-focused. They have little regard for work-life balance, with work tending to be the center of their lives. On the other hand, Generation X introduced the concept of a work-life balance into the workplace. Millennials are ambitious, but their motto is “work hard, but work where you can play hard too.” They want the lifestyle money can buy and the time to enjoy family and friends. Finally, for Gen Z, work-life balance is one of their highest priorities.



With sufficient new hires, the next generation of skilled railroad workers can be where there’s a happy equilibrium between long and irregular hours and time off with above-average compensation.

What about college?

Approximately 60 percent of high-school graduates enroll in a college or a university, perhaps assuming it’ll lead to a good job. After graduation, though, half take jobs they could’ve had without a degree, and many STEM students pursue careers unrelated to their degrees.

For those interested in the railroads, only a handful of college programs focus on the railroad industry. Illinois offers B.S., M.S., and Ph.D. programs within the Department of Civil and Environmental Engineering with a railway transportation focus.

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Penn State Altoona offers an ABET-accredited Rail Transportation Engineering program. The Rail Academy of Central California (TRACC) provides a two-year Railroad Operations program.

However, most colleges or universities offer programs that indirectly relate to rail jobs, such as engineering, computer science, and transportation logistics. These disciplines are key to railroad innovation and modernization and are another category of skilled labor the industry needs to employ.



Military Vets

U.S. railroads have a 150-year history with the military. They began transporting troops, supplies, artillery, and horses for the Union and Confederate forces during the Civil War. Since then, railroads have continued to support U.S. military operations. Conversely, many veterans have transitioned to serving the military and the U.S. public by working directly for private railroad companies. As of September 2024, one in six rail employees are veterans, according to the Association of American Railroads. This is not surprising.

There are many similarities between military service and life as a railroader. Culturally, the military emphasizes selfless service, dedication, discipline, and teamwork, sharing the same ethos and values as railroaders. Additionally, the military heavily relies on engineers, mechanics, logistics experts, IT specialists, and others with skills that the railroad industry needs. Furthermore, federal law requires individuals to be at least 18 years old to work for the

railroads—or 21 for certain roles, such as operating a locomotive. They must be physically capable of performing the job, which can involve lifting heavy objects, walking long distances, climbing on and off trains, and working outdoors in extreme heat or cold. Many veterans are accustomed to working in dangerous, gritty industrial jobs outdoors around large machinery. All these factors, combined with their emphasis on safety and maintaining constant situational awareness while adapting to changing conditions—including long, irregular hours—make veterans especially well-suited for careers in the railroad industry.

It's an appealing option for military veterans—one that can provide a stable income with excellent retirement benefits. Those who retire after 30 years of service receive more than twice the benefit than the average Social Security recipient. Ultimately, railroad companies provide veterans with a rewarding career where their public service continues to be appreciated and valued.

Cranemasters. Your Skilled Railroad Workforce On Demand

Finding and maintaining a skilled railroad workforce can be costly and time-consuming. Our company takes that burden off your shoulders, providing experienced, highly trained railroad professionals on demand. You no longer need to worry about recruiting, training, or retaining employees—our workforce is ready to deploy whenever and wherever you need them.

With our services, you avoid the costs of payroll, benefits, and downtime when work is slow. Instead of maintaining a full-time workforce with fluctuating workload demands, you get a flexible, cost-effective solution that ensures productivity without unnecessary overhead. Our teams are certified, safety-trained, and available 24/7 to meet your project requirements.

Let the Cranemasters workforce keep your operations on track. Partner with us for seamless, efficient, and cost-effective railroad solutions.

Get Your Career on Track

Spring 2025 | Mark Coressel

Heroes Wanted: Veterans, First Responders & Service-Minded Individuals—Apply Today!

Another year is underway, and it's a highball run. Perhaps you're considering changing your career.

Think about this:

Do you want a career that values and compensates your hard work?

Are you seeking a career where advancement is based on your efforts?

Are you a dedicated, service-oriented individual seeking a career where dedication and service orientation are the norm rather than the exception?

Are you a veteran or first responder seeking a similarly purposeful career?

Do you want to be part of an industry, vital to the economy, with a rich history in the making of America? One that prioritizes public and employee safety and the environment, offers challenges with deserved rewards, and sets you on the path to a fulfilling career?

If you answered yes to these questions, railroad work may be right for you.

Make no mistake – rail work is hard work. The hours can be long, and the work conditions are sometimes extreme. But, the pay, benefits, comradery, and the

knowledge of how important you are to those who depend on you is worth it. And, every person in our nation depends on our railroad workers to move the essential goods and raw materials we all need.



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Veterans and First Responders

Rail careers are particularly well-suited for veterans and first responders. The Association of American Railroads (AAR) explains it this way:

“The skills developed and valued in the military — a sense of dedication, discipline, teamwork and adherence to safety — are the same skills that keep the backbone of the nation’s economy efficiently running. Veterans are particularly well-suited for railroad careers because they have diverse skills and can adapt to changing conditions. Unlike many other private industries, railroads understand the technical aspects and demands of an armed forces job.”

Similar to other public service work, rail work is more than just a job; it’s a way of life. When you join the railroad industry, you become part of a close-knit family devoted to serving the nation and its people.

When Gulf War veteran Jim Leposky left the army, he found a home at Cranemasters. Here’s how he compared his work at Cranemasters to his military service:



Jim Leposky
Regional
Superintendent of
Track Services
Cranemasters, Inc.

“The cultures are similar. It involves hard work and camaraderie among the crew. Additionally, there is a mission and a sense of being part of something greater that matters to the country.”

Cranemasters is active working with all branches of the military to recruit and place veterans. We’d be honored if you would join the crew that keeps America on track.

Growth in the Rail Industry Means Growing Opportunities

Nowhere is the need for committed workers greater than in the track maintenance and service sector.



FORTUNE BUSINESS INSIGHTS, reports that the North America rail infrastructure market is projected to grow from \$119.43 billion in 2022 to \$162.72 billion by 2029, a compound annual growth rate (CAGR) of 4.52% between 2022 and 2029.

Source: <https://www.fortunebusinessinsights.com/north-america-rail-infrastructure-market-107025>

Keeping over 155,000 miles of railroad tracks in the U.S. in good working order is critical to the U.S. economy. According to AAR, economic output loss due to a nationwide rail shutdown could be more than \$2 billion daily.

All that to say, you’ll get to prove your worth and reap the rewards. For instance, Bailey Harrell started in our equipment wash bay in 2017. Today he’s the Superintendent of Merrillville, IN. Right now he’s on a 3-year project in charge of 20 track workers.

Why Choose Cranemasters?

Pay and Benefits

- Medical Insurance
- Health savings accounts (HSAs) and flexible spending accounts (FSAs) options. Two of the best ways to put money aside tax-free for health care expenses
- Dental Insurance
- Vision Insurance
- 401K with Employer Match
- Paid Time Off
- Supplemental Benefits
- Clothing allowances
- Employer-paid Life Insurance

Travel and Adventure

Every day is different, and the job takes you places—working side-by-side with a crew that becomes like family.

Work with the Best

You'll get to work alongside hardworking, no-nonsense pros who know what it takes to get the job done—and for a leading innovator of safety and efficiency in rail services.

Job Security and a Career

Railroads keep the country running. Our work is always in demand.

Continual Learning

We are always investing in our people to advance our safety and operational efficiencies while providing opportunities to advance their careers.

See Where Your Skills Can Take You

Track Skilled Workers

Build and maintain critical rail infrastructure, ensuring trains move safely and on schedule.

Machine Operators

Handle heavy equipment like excavators, cranes, and tampers to lay and repair tracks.

Rail and Car Repair Welders

Strengthen and restore vital railway structures.

MIG and TIG welders and Shop Assistants

Work on heavy-duty cranes and equipment that we design and restore, purpose-built for Railroad work.

Emergency Derailment Specialists

Respond quickly to clear wreckage, repair tracks, and restore operations—essential work that keeps the railways running.

CDL Drivers

Transport heavy equipment and materials.

Supervisors and Foremen

Lead crews, manage projects, and ensure safety standards are met.

Engineering Specialists

Design heavy equipment and plan operations.

Let's Get Started

Imagine the pride you'll feel standing with your kids or grandchildren, watching a powerful, endless train thunder down the tracks. The ground shakes, the air hums with energy—and with a steady voice, you say, "I made that happen."

The tracks beneath it, the bridges it crosses, the miles it travels—built by your hands, your grit, your legacy. This isn't just a job. It's something that lasts. Something that has moved America nearly two centuries and will be incredibly important and always in demand.

Interested? Call the Cranemasters HR hotline at 1-888-265-6271 and speak with one of our railroad employment specialists, who can help determine whether rail work is your next adventure.

To see a list of available positions with Cranemasters, visit the [Career page of our website here.](#)

Understand Railroad Security

Spring 2025 | Mark Coressel

Railroad security is often overshadowed by concerns over accidental derailments, which are highly visible and have immediate costs. While strong safety protocols are essential, they alone do not ensure security. A false sense of safety may arise if resources are allocated solely to accident prevention without addressing broader security risks.



Security in rail systems can be categorized into two distinct types: Physical Security and Cyber Security.

Physical Security protects people, cargo, and infrastructure from theft, vandalism, or physical threats.

Cybersecurity focuses on safeguarding digital systems, operational technology (OT), and sensitive information from cyber threats.

Both aspects are interconnected, and their effectiveness relies on a comprehensive approach that acknowledges their unique challenges and solutions.

Physical Security

On January 13, 2025, thieves attacked a freight train traveling through a remote stretch of the Mojave Desert between Arizona and California. Their target? Not weapons, gold, or high-tech equipment—sneakers.

Specifically, 1,900 pairs of the highly anticipated Nigel Sylvester x Air Jordan 4s, set to release on March 14 at \$225 a pair. The total haul? A staggering \$440,000.

However, the impact went beyond financial loss. The theft disrupted product launches, affected the brand's reputation, and underscored vulnerabilities in supply chain security. It served as a stark reminder: **Identifying potential threats and mitigating security risks is crucial for railroad operations.**



MSG(R) Shane M. Kerwin
Founder & Lead
Instructor
Personal Survival
Solutions

Security expert Shane Kerwin, Founder and Lead Instructor at Personal Survival Solutions, has collaborated with various businesses, leveraging his experience as a retired U.S. Army Master Sergeant and Green Beret. He stresses that security measures must be adaptive, proactive, and constantly updated. According to Kerwin, three essential security protocols can significantly mitigate risks—without incurring significant costs or requiring substantial effort.

1. See Something, Say Something

Your employees are your first line of defense. Fostering a culture where team members can report anything unusual without repercussions—such as unidentified individuals, misplaced equipment, damaged infrastructure, or unexpected delivery schedules—can help detect threats early.

The key is clarity. Employees should know exactly how and to whom to report concerns; every report should be taken seriously and investigated.

2. Controlled Access for Personnel and Guests

Restricting access to sensitive areas is a basic yet essential security measure, whether through secured badge systems, color-coded ID badges, or other verification methods. It should be easy to identify who belongs and who doesn't.

Many organizations neglect to inform employees about changes in access, especially when someone is terminated. A disgruntled former employee can present a significant risk, so prompt communication regarding access revocations is essential.

3. Build Relationships with Law Enforcement and First Responders

Knowing your local police and emergency personnel strengthens security in two ways:

- They'll respond more urgently to incidents at your facility when they have a personal connection to your team.
- Their expertise can help you improve security measures proactively.

Hosting a casual event, like lunch with your employees and local officers, fosters familiarity, making it easier for your team to seek help when needed.

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The Cost of Inaction

Security isn't just about prevention; it's about cost management. Kerwin often reminds clients that the price of ignoring security risks can be far higher than the price of prevention: **"Some individuals hesitate to invest in security for situations that 'might not happen.' But, consider the costs if something does occur—property loss, legal fees, increased insurance rates, damaged reputation, and**

expedited security upgrades at premium prices. Proactive security is always more cost-effective than reactive security."

By implementing these straightforward measures, organizations can enhance security, protect assets, and build resilience against potential threats.

Cybersecurity

In May 2021, the Colonial Pipeline suffered a significant cyberattack when hacker group DarkSide stole 100GB of data and deployed ransomware. Colonial paid a \$4.4 million ransom and shut down the pipeline from May 7-12 to investigate and repair its technology and security. That shutdown caused fuel shortages and price spikes, and President Biden declared a national state of emergency. The breach led to costly investigations, legal battles, and economic disruptions. The ransomware assault on Colonial Pipeline was a cybersecurity wake-up call to companies working in and around critical infrastructure networks. It showed how significant and extensive the costs and effects can be.

[The ISA Global Security Alliance](#) underscores the concern: **"The railway industry is increasingly viewed as a viable target for cybercriminals. Signaling systems, traction systems, train control systems, passenger information systems, and station infrastructure are all potentially at risk. [...] Railway systems, which have been considered safe for decades, can now be compromised by newly introduced digital commands. The manipulation of such commands can cause collisions and other nightmare scenarios: Cyber-criminals may decide to attack ticket machines, passenger information displays, and passenger Wi-Fi systems."**



James Motes
Chief Information Security Officer & Senior Vice President
Ryan, LLC

James Motes, Chief Information Security Officer at Ryan, LLC, found that **"rail systems have seen a 220% rise in cyberattacks over the past five years due to increased digital connectivity and aging operational technology (OT) exposure."**



Jeff Stark
Chief Information Officer
Cranemasters, Inc.

Jeff Stark, Cranemasters' CIO notes, "In the railroad industry, there's a combination of old and new technologies. A lot of rail technologies have been in use for decades. However, Wi-Fi, the Internet of Things, AI, and other advances have provided new, cutting-edge tools that provide opportunities but

also potential threats. Differences in how legacy and newer systems work complicate connecting them without leaving the door open for cyberattacks. The challenge is bridging the security gap between these technologies, as we find new ways to gain efficiencies and interact with our clients.

Your Primary Defense

Stark says the employees are your primary cybersecurity defense. He believes that your goal should be ensuring that all your employees understand IT best practices and follow them diligently. During his six years at Cranemasters and more than 25 years creating and supporting secure technology networks for Fortune 50 companies, including Verizon and IBM, Stark has defined four keys to ensure employees are prepared and your defense is as strong as possible.

1. Pay Attention and Stay Cautiously Aware

Employees use technology throughout the day at work and home. They can typically sense when something is wrong. Long boot times, programs that take too long to respond, and sudden or repeated browser crashes can indicate that your system has been hacked. Reporting suspicions is the best practice. Remind employees to remain "cautiously aware" in both their professional and personal lives. This isn't about being afraid; it's about being aware.

2. Dangers: Phishing, Ransomware, Spoofing, Malware, Virus

Spam arrives in everyone's inbox daily. It's important to distinguish between annoying emails and genuine email attacks. You want your employees to delete nuisance emails and report real threats. Awareness of actual threats that reach an employee's inbox enables you to adjust your

defenses, preventing similar emails from getting through to other employees.

3. Share Actual Examples

Once a threat is no longer a security risk, quickly inform your entire staff about the incident. Explain what actions you have taken to prevent its recurrence, what they need to do, and how they can identify and report it if it happens again. Breaches provide an opportunity for further security education for your employees and serve as a reminder of the importance of remaining vigilant.

4. See Something, Say Something

Clarify how and to whom suspected threats should be reported. It is essential to take every report seriously by investigating each one thoroughly. Additionally, do not discourage employees from reporting concerns, even if they seem excessive. Instead, treat false alarms as opportunities to educate employees on refining their skills in identifying risks. Ensure they understand that it is always better to over-report than to overlook a critical breach.

Stark emphasizes that staying abreast of technological changes and educating employees is essential for your cybersecurity defenses. However, it's important to remember that no technology is impenetrable, and you cannot guarantee that a breach will not occur. Consider it an arms race and prepare for the inevitability of an attack.

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Build Your Security Program

Here's a straightforward three-step framework for developing and maintaining robust security programs:

STEP 1: Assess, Determine, Implement

Assess your security risks and vulnerabilities:

- What security risks exist for cargo, equipment, and personnel?
- Is the location prone to high crime rates?
- Who has access to critical computer networks?
- What physical security measures (cameras, alarms, patrols) are needed?
- How should security investments be prioritized within budget constraints?
- Determine the best security solutions based on identified risks.

Implement security measures in a structured, strategic manner.

STEP 2: Train, Verify, Train

- Train employees thoroughly in security protocols relevant to their roles.
- Verify that protocols are being correctly followed. This process should focus on identifying weaknesses rather than punishing employees.
- Train continuously to ensure employees remain prepared and vigilant.

STEP 3: Evaluate, Update, Amend

- Evaluate security measures at regular intervals (monthly, quarterly, annually) to identify strengths and weaknesses.
- Update security measures in response to new threats, industry advancements, or environmental changes.
- Amend security protocols proactively to prevent costly breaches.

Step 4: Seek Expert Assistance

Consulting a security expert may be beneficial if your team lacks the expertise to conduct thorough security assessments. When selecting a partner, consider:

- Relevant expertise in physical or cyber security.
- Experience with security assessments and solutions for similar-sized organizations.
- Long-term partnership potential, rather than vendors focused solely on sales.

This is just a top view outline to get started. The details of the plan will depend greatly on your particular situation, complexities, and goals. Security requires a relentless effort but is essential to preventing financial loss, reputational damage, and operational disruptions. Proactively strengthening your security posture today will safeguard your rail operations for the future.

Cranemasters Brings Quiet to the Neighborhood

Spring 2025 | Cranemasters

The Belt Railroad Company of Chicago (BRC) tasked Cranemasters with replacing retarders and tracks to help make the nearby community a quieter place to live. Cranemasters was engaged to remediate excessive noise produced during pull-out operations at the East Classification Yard by replacing 56 existing inert retarders with SR2000 Operable Skate Retarders.

The 3-year project began September 2024. Although the job continues, as of February 2025, Cranemasters is 6 days ahead of schedule.



BRC is the largest intermediate switching terminal railroad in the U.S., handling nearly 8,400 rail cars every 24 hours in Chicago, where almost all railroads connect. Its primary purpose is to sort, classify, and assemble freight cars bound for specific destinations.

As with other classifying yards, railroad cars are pushed over a raised track—a hump—and released to roll onto designated tracks. As the individual cars coast down the hump, retarders control the speed by applying pressure to the wheels of the cars to ensure safe coupling with the other cars in the line up. Automated systems adjust the pressure based on the car's weight and speed, enhancing efficiency.

However, older retarders squeeze the wheels when the train of coupled cars is being pulled out, causing a "retarder squeal" that can last for several minutes at 100 to 130 decibels. This volume is comparable to the loudness of a rock concert or a jackhammer. In contrast, new systems like the RS-2000, manufactured by Trackage Services, reduce noise by avoiding contact when the line of coupled trains are pulled out for departure.

BRC is highly concerned about the people in the communities where it operates and the environment, including noise pollution. Accordingly, BRC decided to upgrade to quieter retarders to minimize noise at its East Classification Yard in Bedford Park, IL. Replacing the yard's many retarders was assigned to Cranemasters, which has the equipment, experienced crews, and know-how for such a large project.

Cranemasters' Scope of Work

- 3-Year Timeframe
- Excavation and ballast work
- Replace over 42,000 LF of existing rail
- Raise and surface almost 30,000 TF of track
- Remove 8,800 TF of existing track at panel locations
- Install 38 (40') track panels and 18 (80') panels
- Install 56 retarders
- Replace defective ties and compromise joints

Cranemasters' Solution for This Substantial Track Upgrade Project

Cranemasters Strategic Systems Operations™

Drawing upon decades of experience handling some of the most challenging jobs, we performed a systematic evaluation of on-site conditions and job requirements to best address the customer's business objectives.

After the assessment, we developed the most efficient and safe strategy and work plan. Our leadership was actively present, attentive to every detail, ensuring that the best decisions were made for the best possible outcome. This plan called for:

- Process for retarder and panel replacement
- Process to change out rail between switch and retarder
- Process to surface track



Bailey Harrell
Superintendent of
Track Construction &
Repair
Merrillville, IN Division
Cranemasters, Inc.

On-site Professional Crews

The project required 20 of Cranemasters' skilled workers, directed on-site by Bailey Harrell, Superintendent of Track Construction & Repair in Merrillville, IN.

Cranemasters Deployed Purpose-Built Equipment

- Stanley Unit
- M322 Hi-Rail Excavator (2) and Rail Cart (2)
- Hi-Rail Dump Truck
- Grapple Truck
- Backhoe
- Track Van
- Spiker
- Tamper
- Ballast Regulator



9
Retarders
Installed in
One 5-Day
Sprint

6 Days
Ahead of
Schedule
2/10/2025

Results

In August 2024, the first phase of the three-year project began with the replacement of 18 retarders. Phase two will include 20 more, with the remainder scheduled for phase three. During phase one, BRC suspended up to nine tracks for three weeks to accommodate the work.

Cranemasters crews worked 10-hour days to complete installations efficiently and minimize

downtime. In one five-day sprint, they installed nine retarders—demonstrating exceptional efficiency. Cranemasters was six days ahead of schedule by early February, with no incidents.

The project’s success is driven by Cranemasters’ Strategic Systems Operations™ processes, ensuring safety, efficiency, and top-quality results.

Cranemasters Railroad Emergency and Construction Services

Full rail support services with innovative purpose-built equipment and experienced crews ready to deliver safe and efficient solutions:

- Qualified for Class 1 and short line railroad, and industrial siding FRA inspections
- Emergency Derailment
- Bridge Span Replacement
- Complex Track Installation & Repair Switches and Retarders
- Innovative Design
- Crane Manufacturing & Rebuild
- Natural Disaster
- Heavy Equipment Recovery
- Load Adjustment & Transfer
- Rail Car & Locomotive Maintenance & Repair

Cranemasters Operations Centers Nationwide

As a working team of rail services professionals, our available inventory of equipment and crews from our locations can be mobilized 24/7/365.

