

Notice 2015-16

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May 15, 2015

Via U.S. Mail and Email

CC:PA:LPD:PR (Notice 2015-16)
Room 5203
Internal Revenue Service
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044
Notice.comments@irs.counsel.treas.gov

RE: *Notice 2015-16 — Excise Tax on High Cost
Employer-Sponsored Health Coverage*

Dear Ladies and Gentlemen:

The Brotherhood of Maintenance of Way Employees Division of the International Brotherhood of Teamsters ("BMWED") appreciates the opportunity to provide comments in response to the above-referenced notice issued by the Department of the Treasury and Internal Revenue Service on February 23, 2015 describing potential approaches with regard to a number of issues under Section 4980I of the Internal Revenue Code ("Code"), 26 U.S.C. § 4980I, as added by the Patient Protection and Affordable Care Act ("ACA"), and inviting comments by May 15, 2015.

These comments focus on the adjustments for high-risk professions for the purposes of applying the excise tax under Code Sections 4980I(b)(3)(C)(iv) and 4980I(f)(3). The BMWED is the collective bargaining representative for over 30,000 rail carrier employees who build, construct, inspect, maintain, and repair the tracks, bridges, buildings, and other structures on railroads across the United States. These employees, who are known in the railroad industry as "maintenance of way" employees, are responsible for constructing and reconstructing the entire infrastructure on which passenger and freight rail runs in America.

BMWED members receive collectively bargained healthcare benefits from the Railroad Employees National Health and Welfare Plan ("Plan") pursuant to collective bargaining agreements between BMWED and various railroads. For purposes of effecting changes to the

Plan, BMWED and other rail labor organizations, either in bargaining coalitions or singly, bargain with the National Carriers' Conference Committee which represents various rail carrier employers including the Burlington Northern Santa Fe Railway, CSX Transportation, Inc., Norfolk Southern Railway, Union Pacific Railway, and Kansas City Southern Railway.¹

The ACA added new Code Section 4980I, which imposes an excise tax, commonly referred to as a "Cadillac Tax," on certain high cost plans. Specifically, Section 4980I adds a 40% excise tax on benefits provided by a health plan that exceed certain dollar thresholds. Because the tax is not specifically intended to punish health plans simply because they provide benefits to sicker individuals, the statute includes a number of risk adjustments that increase the dollar threshold before the Cadillac Tax attaches. This comment relates to one of those risk adjustments.

Code Section 4980I(b)(3)(C)(iv) increases the excise tax thresholds for plans covering participants employed by an:

employer the majority of whose employees covered by the plan are engaged in a high-risk profession or employed to repair or install electrical or telecommunications lines

Under § 4980I(f)(3), the term "employees engaged in a high-risk profession" is statutorily defined to include "individuals engaged in the construction, mining, agriculture (not including food processing), forestry, and fishing industries."

As explained in more detail below, the BMWED urges the Department of the Treasury and the Internal Revenue Service to adopt a regulatory definition of "construction industr(y)" under § 4980I(f)(3) that encompasses the work performed by BMWED members. Although the craft/class of railroad workers represented by BMWED is referred to as the "maintenance of way" craft/class because employees represented by BMWED maintain the railroad "right of way" (i.e., the line of railroad) and related structures like bridges and buildings, the statements of BMWED Vice Presidents David Joynt and David Scoville submitted with this letter as Exhibits A and B demonstrate that the work done by "maintenance of way" employees consists of the construction and reconstruction of railroad lines, bridges, and buildings. Additionally, railroad industry collective bargaining agreements, arbitration awards, and numerous Department of Labor regulations all recognize that maintenance of way work is construction work. Moreover, maintenance of way work is a high-risk profession known to result in both on-the-job fatalities and chronic, long-term health conditions. Accordingly, healthcare benefits for maintenance of way workers deserve the same excise tax treatment as those for other high-risk professions.

¹ The Plan serves railroad workers represented by the rail labor unions represented by the BMWED, as well as railroad workers represented by the American Train Dispatchers Association ("ATDA"); International Brotherhood of Electrical Workers ("IBEW"); International Association of Machinists and Aerospace Workers ("IAM"); the Transportation Communications Union ("TCU"), including its Brotherhood of Railway Carmen ("BRC") division; the Transport Workers Union ("TWU"); Brotherhood of Locomotive Engineers and Trainmen ("BLET"); Brotherhood of Railroad Signalmen ("BRS"); International Brotherhood of Boilermakers and Blacksmiths ("IBB"); and the National Conference of Firemen and Oilers ("NCFO"). As of Plan Year 2013, the Plan provided healthcare to 105,396 active participants and 194,475 retired participants.

I. The Work Done by Maintenance of Way Employees Is Construction Work.

Maintenance of way work consists of the construction and reconstruction of the railroad lines, bridges and related buildings and structures.² The full scope of maintenance of way work can be found in the collective bargaining agreements between BMWED and the major Class 1 freight rail carriers – CSX Transportation, Inc. (“CSXT”), Norfolk Southern, Burlington Northern and Santa Fe Railway, Union Pacific Railway, Canadian Pacific Railway, Canadian National Railway, and the Kansas City Southern. For instance, the collective bargaining agreement effective June 1, 1999 between CSXT and BMWED describes the scope of maintenance of way work as all of the following:

all work in connection with the construction, maintenance, repair, inspection or dismantling of tracks, bridges, buildings, and other structures or facilities used in the operation of the carrier in the performance of common carrier service on property owned by the carrier. This work will include rail, guard rail, switch stand, switch point, frog, tie, plate, spike, anchor, joint, gauge rod, derail and bolt installation and removal; erection and maintenance of signs, such as mile posts, speed restriction signs, resume speed signs, crossing and station signs, warning signs, and signs attached to buildings or other structures (except billboards); construction of track panels; welding, grinding, burning, and cutting; ballast unloading, regulating, equalizing, and stabilizing; track and switch undercutting; cribbing between ties; track surfacing and lining; snow removal (track structures and right of way); road crossing installation and renewal work; asphaltting of road crossings (unless required by outside agencies), culvert installation, repairs, cleaning and removal; yard cleaning; security and ornamental fences; distribution and collection of new and used track, bridge and building material; operate machines, equipment, and vehicles; transporting maintenance of way employees; mowing; installation, maintenance, and repairs of turntables, platforms, walkways, and handrails; head wall and retaining wall erection; cleaning, sandblasting, and painting of machines, equipment, bridges, turntables, platforms, walkways, handrails, buildings, and other structures or facilities; rough and finish carpentry work; concrete and masonry work; grouting, plumbing, and drainage system installation, maintenance, and repair work; cooling and heating system installation, maintenance, and repair work; fuel and water service work; roof installation, repairs, and removal; drawbridge operation and maintenance and any other work customarily or traditionally performed by BMWED represented employees.

A September 2009 Memorandum of Agreement between CSXT and BMWED further clarifies that BMWED’s jurisdiction includes all new building construction:

² A small number of BMWED members work constructing and maintaining the power lines for Amtrak. In addition to working in the construction industry, these members also fall within the categories of individuals “employed to repair or install electrical or telecommunications lines” under Code Section 49801(b)(3)(C)(iv).

The work of constructing new “non-occupied” buildings and related structures or facilities used in the operation of the Carrier in the performance of common carrier service on property owned by the Carrier shall be performed by BMWED represented employees and the Carrier shall not contract out such work. “Nonoccupied” buildings are buildings such as pole barns, sheds, garages and other storage facilities that are not equipped with HVAC systems or bathroom facilities because they will not be used for offices, shops or other human habitation.³

Similarly, the collective bargaining agreement effective May 19, 1976 between Amtrak, the Nation’s passenger rail carrier, and BMWED provides that maintenance of way work consists of all “inspection, construction, repairs and maintenance of water facilities, bridges, culverts, buildings and other structures, tracks, fences and roadbed, including catenary system, third rail, substations and transmission in connection with electric train operation.”

Arbitration decisions by the National Railroad Adjustment Board (“NRAB”) and Special Boards of Adjustment (“SBA”) resolving disputes between BMWED and rail carriers have further enforced the fact that maintenance of way work is construction work. The NRAB and SBA awards have repeatedly held that railroad construction work is the domain of maintenance of way employees and railroads cannot reassign construction work to others except when permitted by collective bargaining agreements. *BMWED v. CSX Transportation, Inc.*, Award No. 37985 (Nat’l R.R. Adj. Bd. Oct. 25, 2006) (finding construction of track, bridge, abutment, and retaining wall is work reserved to BMWED members); *BMWED v. Union Pacific Railroad Company*, “Pre-Plated Tie Dispute” (Special Bd. of Adj. Apr. 30, 2003) (finding that all track construction, including preplating wood ties is work reserved to BMWED members); *BMWED v.*

³ See also, for instance, the July 1, 2001 collective bargaining agreement between BMWED and Union Pacific, which describes Bridge & Building Department work at Rule 8 as:

The work of construction, maintenance and repair of buildings, bridges, tunnels, wharves, docks, non-portable car buildings, and other structures, turntables, platforms, walks, snow and sand fences, signs and similar structures as well as all appurtenances thereto, and other work generally so recognized will be performed by employees in the Bridge and Building Subdepartment.

It further describes the work of the Track Department in Rule 9 as:

Construction and maintenance of roadway and track, such as rail laying, tie renewals, ballasting, surfacing and lining track, fabrication of track panels, maintaining and renewing frogs, switches, railroad crossing, etc., repairing existing right of way fences, construction of new fences up to one continuous mile, ordinary individual repair or replacement of signs, mowing and cleaning right of way, loading, unloading, and handling of track material and other work incidental thereto will be performed by forces in the Track Subdepartment.

Delaware and Hudson Railway Company, Award No. 27576 (Nat'l R.R. Adj. Bd. Jan. 29, 1988) (finding refurbishment of the rail yard is work reserved to BMWED members); *BMWED v. Terminal Railroad Association of St. Louis*, Award No. 23928 (Nat'l R.R. Adj. Bd. Jan. 10, 1973) (finding construction of a pole barn is work reserved to BMWED members); *BMWED v. Norfolk and Western Railway Company*, Award No. 19578 (Nat'l R.R. Adj. Bd. Jan. 30, 1973) (finding construction of new buildings is work reserved to BMWED members). Moreover, all the basic underlying tasks of construction are maintenance of way work – demolition of old buildings, digging ditches, welding, grinding, pouring concrete, building structures, etc. See *BMWED v. Union Pacific Railroad Co.*, Award No. 40409 (Nat'l R.R. Adj. Bd. May 14, 2010) (finding construction of concrete culverts under bridges and the removal of a bridge is work reserved to BMWED members); *BMWED v. Union Pacific Railroad Company*, “Track Panel Fabrication Report” (Special Bd. of Adj. Nov. 6, 2001) (finding fabrication of turnout track panels is work reserved to BMWED members); *BMWED v. St. Louis Southwestern Railway Co.*, Award No. 26951 (Nat'l R.R. Adj. Bd. Mar. 30, 1988) (finding welding, grinding, stripping, cropping, and loading of rail is work reserved to BMWED members); *BMWED v. The Cheapeake and Ohio Railway Co.*, Award No. 27585 (Nat'l R.R. Adj. Bd. Oct. 27, 1988) (finding ditching work reserved to BMWED members); *BMWED v. Northeast Illinois Regional Commuter Railroad Corp.*, Award No. 26378 (Nat'l R.R. Adj. Bd. June 25, 1987) (finding welding and grinding work is reserved to BMWED members); *BMWED v. Chicago & Northern Western Trans. Co.*, Award No. 54 (Public Law Bd. May 17, 1979) (finding demolition of house and removal and hauling of debris is work reserved to BMWED members); *BMWED v. St. Louis-San Francisco Railway Co.*, Award No. 20158 (Nat'l R.R. Adj. Bd. Feb. 28, 1974) (finding ditching work reserved to BMWED members).

In the performance of this construction work, maintenance of way workers are organized into two categories – those who work in Track Department and those who work in the Bridge and Building Department. Some rail carriers also have Roadway Equipment Departments, which function to maintain all the equipment used by the other two departments.

A. Maintenance of Way Work in the Track Department

Track Departments are responsible for constructing and reconstructing the rail line. Track department employees are typically organized into “gangs” that will lay new rail or replace existing rail, lay new rail ties or replace existing ties and apply or replace ballast in the track. There are large, heavily mechanized steel or rail gangs, tie gangs, and surfacing gangs that operate system-wide or regionally. There are also smaller mobile gangs and section gangs that will reconstruct smaller sections of track by replacing rail, ties, and/or ballast.⁴ These maintenance of way employees are laborers, machine operators, heavy equipment operators, crane operators, welders, equipment mechanics, boom truck and CDL drivers, track inspectors, tunnel watchmen, fire patrolmen, track patrolmen, lead grinders, rail heat treaters, and foremen of various specialties (*i.e.*, production foremen, track foremen, welder foremen, crane foremen, inspector foremen, work train foremen, *etc.*). They use a wide range of heavy duty construction equipment, not limited to adzing machines, anchor applicators, bolt tighteners, cribbexes, track gaugers, cribbing machines, tractors, spike pullers, spike drivers, tie plug setters and drivers, rail

⁴ A more detailed description of this work is attached as Exhibit A, Statement of David Joynt.

oilers, tie borers, creosote sprayers, multiple rail drills, stationary abrasive saws, power track jacks, tie bed scarifiers, schramm pneumattractors, and crawlair truck mounted compressors.

In order for the rail line to be reconstructed, a Maintenance Gang must first prepare the area to be worked on, including using a crawler backhoe, a rubber tired backhoe, a boom truck, and other hydraulic tools to remove the bolt lags from the road crossing and using hydraulic jack hammers to remove any concrete or asphalt roadway. The Steel Gang (or Rail Gang) will then loosen and remove the old rail that will be replaced by removing the spikes on wood ties and the clips from concrete ties that are holding the rail to the ties.⁵ The old rail is then cut out, removed from the track by a large crane, and placed to the side of the track. Next, the old tie plates must be removed and the underneath surface smoothed by using an adzer machine to cut the wooden ties or a putting sealer on concrete ties. New tie plates are installed and then a crane drops a new piece of quarter-mile-long continuous-welded rail in place.⁶ The Steel Gang fits the new rail in place, weatherizes it by heating it up or cutting out small sections to reach the desired "rail neutral temperature," and installs it into place using fasteners (spikes, clips) on wooden or concrete ties and installing rail anchors to preserve the desired neutral temperature adjustment. The Maintenance Gang must then replace the road crossings that were removed by using machinery to install wood crossing planks, concrete slabs, or asphalt and then using lag bolts to hold the crossing material in place.⁷ In the meantime, the Welding Gang is welding together the old and new pieces of rail together so there are no joints, but continuous rail. Using thermite or boutet welding, the Welding Gang heats materials up to 4,500°F to create molten metal that is poured into a form attached to the rail.⁸ The hot metal fills the gap between the rails creating one long continuous welded rail. Once the new rail is installed, the Surfacing Gang must correct and straighten any alignment of the track that may have been disturbed by the Steel Gang. The Surfacing Gang ensures there is proper ballast back in the track and on the shoulders to keep the track from buckling in extremely hot weather.

⁵ Examples of the process of removing old rail are available at <https://www.youtube.com/watch?v=tNFpPcEAI-Y>.

⁶ Examples of the process of laying new continuous welded rail are shown at <https://www.dropbox.com/s/rrm5mdoybjou5br/XCEL0045.MP4?dl=0>, <https://www.youtube.com/watch?v=UF0oo8Ra8U8>; https://www.youtube.com/watch?v=X0_KI3I9UCA; https://www.youtube.com/watch?v=aqkO3_hIFvc; and <https://www.youtube.com/watch?v=OoDFXT8I.y-s>.

⁷ An example of replacing a crossing is shown at <https://www.youtube.com/watch?v=cTXkZeZ4GJI>.

⁸ An example of thermite welding is shown at <https://www.youtube.com/watch?v=OR-QvQ3bk84>.

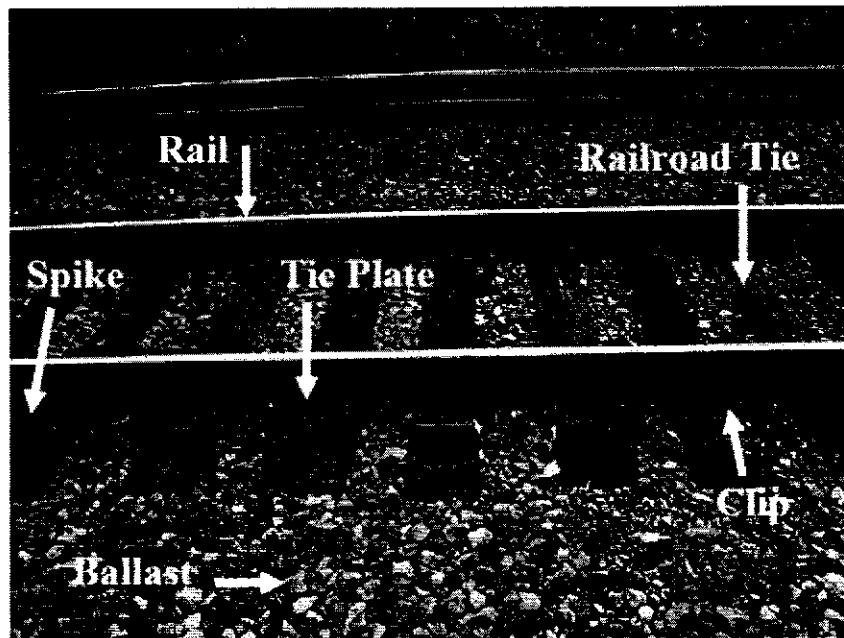


Figure 1: The components of a railroad line.

Tie Gangs work in a similar fashion to replace old ties with new ties, whether wood ties or concrete ties.⁹ The Tie Gang removes the spikes, clips, and anchors holding the tie in place and then uses a large machine to remove the tie from the track. A tie crane picks up the old ties and stacks them away from the work area. Laborers remove the tie plates from the work area and set them aside to be reused. A scarifier is used to remove the old ballast from the hole where the old tie was removed and another tie crane places the new tie, either on top of the rails or to the side of the track. The tie inserter machine lifts the rail, grabs the tie, and inserts it under the rail. The Tie Gang then replaces the spikes, clips, anchors, and tie plates. The Surfacing Gang will then need to tamp ballast under each tie to make sure the track is completely level, and straight, and supported by the subgrade.

While large-scale projects are performed by these large steel Gangs, Tie Gangs and Surfacing Gangs, smaller Mobile Gangs and local Section Gangs perform similar work for smaller track reconstruction work.

B. Maintenance of Way Work in the Bridge and Building Department

Bridge and Building Department employees are responsible for the construction of buildings, bridges, tunnels, wharves, docks, buildings, turntables, platforms, walks, snow and sand fences, signs, and all other structures necessary for a fully functioning rail line.¹⁰ With

⁹ Examples of replacing ties are shown at <https://www.youtube.com/watch?v=nvYDmKixb4k&index=2&list=PL8EBD24721E442CA8>; and <https://www.youtube.com/watch?v=Hjt5guyRwEQ>.

¹⁰ A more detailed description of this work is attached as Exhibit B, Statement of David R. Scoville.

regard to the construction buildings, maintenance of way workers are responsible for all typical construction work, from the installation of siding, windows, doors, wall, ceilings, handrails, floors, floor coverings, sidewalks, and roofing to some HVAC work, demolitions, and interior and exterior painting. These maintenance of way employees include laborers, bridge mechanics, bridge inspectors, bridge foremen, bridge watchmen, bridge tenders, structural welders, crane operators, carpenters, masons, bricklayers, plasterers, cement finishers, painters, plumbers, water service employees, and HVAC technicians. They use traditional heavy-duty construction equipment, along with railroad-specific equipment such as bridge tie cranes, locomotive cranes, tamping power jacks, tie injectors, and tie spacers.

New Construction Gangs construct and reconstruct buildings and bridges, in some cases replacing wood bridges entirely with new concrete or iron structures. These workers are trained in reading engineering and blueprint designs, iron assembly, welding, carpentry, lead paint removal, and concrete formwork, reinforcement, and placement. They pile drive materials, install girders, assemble forms for concrete back walls, tie rebar in place, install precast, and pour concrete bridge caps.¹¹ They employ the same work methods associated with highway construction.

Carpenter Gangs replace and restore the timber components of wood bridges, which rot out or break down over time. Using boom trucks, bridge cranes, speed swings, bucket lifts, and other machines, they scale bridges to remove the old wood from below the rail deck and maneuver the new timbers into place, working off of staging or man lift devices. In the process, they remove and replace rusty nuts, ship bolts, and worn ties. In many cases, this is all accomplished by building an entire new deck panel and then hoisting it into place with the use of a locomotive crane.

II. Department of Labor Regulations Treat Maintenance of Way as Construction Work

The Department of Labor and its sub-agencies have issued numerous regulations categorizing maintenance of way work as construction work. The Occupational Safety and Health Administration ("OSHA") has historically categorized maintenance of way work as construction work. Under OSHA regulations at 29 C.F.R. § 1926.32(g), construction is specifically defined to include alteration and repair work. The Occupational Safety and Health Review Commission ("OSHRC") has upheld OSHA's jurisdiction to enforce its construction industry standards, found at 29 C.F.R. Part 1926, on maintenance of way activities. *Consolidated Rail Corp.*, 1979 OSAHRC LEXIS 640, 1979 OSHC (CCH) p. 23,392 (1979)(finding violations of construction industry standards in connection with replacement of damaged railroad ties on a bridge); *Burlington Northern Railroad Co.*, 14 OSHC 1402 (1989) (citation for failing to shore trench).

¹¹ Examples of Construction Gang work are shown at https://www.dropbox.com/s/dfinh9v46aftmu4/IMG_0117.MOV?dl=0 and https://www.dropbox.com/s/n8hx32465bgt5v9/IMG_0118.MOV?dl=0.

In an August 11, 1994 memorandum entitled “*Construction*” vs. “*Maintenance*,” OSHA Deputy Assistant Secretary James W. Stanley summarized the Secretary of Labor’s position that maintenance of way work is construction work, stating, “OSHA has consistently taken the position that the repair of railroad track and related structures are construction work.”¹² The Assistant Secretary emphasized that construction work is not limited to new construction, but can include the repair of existing facilities or the replacement of structures and their components. Under this standard, all repair and rehabilitation of railroad track and structures is construction work, including the replacement of ties, rail, and ballast and any on-site work using heavy equipment and workers spread over a large geographical area. The Secretary of Labor has reaffirmed its August 11, 1994 memorandum in subsequent opinion letters in 2003 and 2012.¹³

Most recently, OSHA’s August 9, 2010 Final Rule on Cranes and Derricks in Construction, 75 F.R. 47906-01, specifically provided that OSHA’s construction standards for the use of cranes and derricks were applicable to maintenance of way work, stating “OSHA sees no basis for excluding work along railroad rights-of-way from this rule.”

Moreover, Department of Labor regulations under the Davis-Bacon Act, 40 U.S.C. § 3141 *et seq.*, similarly define construction to include improvement of railroads. Those regulations provide that construction “work” is any construction activity, “include(ing) without limitation, buildings, structures, and *improvements of all types*, such as bridges, dams, plants, highways, parkways, streets, subways, tunnels, sewers, mains, power lines, pumping stations, heavy generators, *railways*, airports, terminals, docks, piers, wharves, ways, lighthouses, buoys, jetties, breakwaters, levees, canals, dredging, shoring, rehabilitation and reactivation of plants, scaffolding, drilling, blasting, excavating, clearing, and landscaping.” 29 C.F.R. § 5.2(i) (emphasis added).

Finally, the Bureau of Labor Statistics categorizes maintenance of way work within the category of “47-0000 Construction and Extraction Occupations” under the title “47-4061 Rail-Track Laying and Maintenance Equipment Operators.”¹⁴ The category 47-0000 Construction and Extraction Occupations includes all building trades as well, including brickmasons and blockmasons; stonemasons; carpenters; floor sanders and finishers; tile and marble setters; cement masons and concrete finishers; terrazzo workers and finishers; construction laborers;

¹² *Memorandum*, Occupational Safety & Health Administration (August 11, 1994), *available at* https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=interpretations&p_id=21569.

¹³ November 18, 2003 Opinion Letter to Raymond V. Knobbs, Occupational Safety & Health Administration (November 18, 2003), *available at* https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=24789; March 13, 2012 Opinion Letter to Kira Henschel, Occupational Safety & Health Administration (March 13, 2012), *available at* https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=28274.

¹⁴ *May 2014 Occupation Profiles*, Bureau of Labor Statistics (March 25, 2015), http://www.bls.gov/oes/current/oes_stru.htm#47-0000.

paving, surfacing, and tamping equipment operators; pile-driver operators; and drywall and ceiling tile installers.¹⁵

III. Maintenance of Way Work Is a High-Risk Profession

Maintenance of way work is physically strenuous and hazardous work, making it a high-risk profession. By the outdoor nature of their work and the fact that they operate heavy machinery on and adjacent to active rail lines, maintenance of way workers experience serious hazards from moving rolling stock, equipment, and vehicles, as well as falls, electrocution, and natural hazards.¹⁶ Publicly available data from the Federal Railroad Administration (“FRA”) shows that maintenance of way employees incurred 2,252 injuries during the two-year period between January 2013 and December 2014, resulting in 81,525 missed days of work. (Ex. C. at 2, 6-7.) As a result, 25.8% or one in four of all railroad worker injuries were injuries of maintenance of way workers, far in excess of their percentage of the railroad workforce. As shown in the FRA data, maintenance of way employees are subject to those hazards characteristic of the construction industry – the environmental dangers assumed in working outdoors (overexposure to heat and cold, animal bites, poisonous plants), the technical dangers of operating heavy machinery (machinery malfunctions, getting caught in/between machines, electric shock, punctures, burns, respiratory problems, exposure to fumes, falls, falling objects), and the location-based dangers of working in an area vulnerable to oncoming traffic (collisions, derailments). (Ex. C. at 2, 6-7.) For example, collisions from oncoming automobiles, trucks, buses, and vans accounted for 125 injuries to maintenance of way workers between January 2013 and December 2014. (Ex. C. at 6.)

The National Transportation Safety Board’s *September 2014 Special Investigation Report on Railroad and Rail Transit Roadway Worker Protection* found that, during 2013, 11 maintenance of way workers died while doing their jobs as a result of occupational hazards, including falls from bridges, incidents involving bucket lifts, strikes by moving trains and on-track equipment, and natural hazards, including a mudslide.¹⁷¹⁸ These deaths closely parallel the numerous and cumulative risks to which maintenance of way workers are exposed.

¹⁵ 47-0000 *Construction and Extraction Occupations (Major Group)*, Bureau of Labor Statistics (March 25, 2015), <http://www.bls.gov/oes/current/oes470000.htm>.

¹⁶ *September 2014 Special Investigation Report on Railroad and Rail Transit Roadway Worker Protection*, National Transportation Safety Board, 1 (September 24, 2014), available at <http://www.nts.gov/safety/safety-studies/Documents/SIR1403.pdf>.

¹⁷ The National Transportation Safety Board is an independent federal agency dedicated to promoting aviation, railroad, highway, marine, and pipeline safety. It was established in 1967 and is mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation.

¹⁸ The Special Investigation Report, *supra* n.16, refers to “roadway workers” as synonymous with maintenance of way workers. See page 1, footnote 2.

First, maintenance of way workers work in close proximity with high-speed trains, with workers often having only a minimum of 15 seconds to temporarily clear themselves and their equipment from an area once a lookout warns them that a high-speed train is approaching. Maintenance of way workers being struck by oncoming trains results in numerous fatalities each year. Second, maintenance of way workers are also forced to perform their work on live railroads within specific time windows between passing trains, which exposes them to extreme weather conditions and creates added pressure to perform work as quickly as possible. The nature of maintenance of way work on live rail lines is that it often must be completed within the same shift because trains will be passing over the same lines imminently. Accordingly, maintenance of way workers must often perform their work in difficult conditions, as was the case when one maintenance of way worker in Old Fort, North Carolina was engulfed by a mudslide during a 16.5-hour shift and died.¹⁹ The FRA cited fatigue as a likely factor in his death.²⁰ Unlike other railroad workers, maintenance of way workers are not protected by hours of service laws that limit the maximum on-duty time they can be required to work.

Similarly, the natural hazards that maintenance of way workers are exposed to, including long hours outdoors in extreme temperatures, are intensified by the type of work they do. Steel rail slowly expands and contracts as temperatures rise and fall. While the rail infrastructure built by maintenance of way workers holds rail in place with the use of ties, rock ballast, and rail anchors, extreme heat can cause track to shift laterally and create a curve in a straight pair of rails.²¹ Maintenance of way workers are called in when the temperatures become extreme to inspect and reconstruct track that has expanded and curved under extreme compression.²² Moreover, the physical process of construction and reconstruction of rail line exposes maintenance of way workers to acutely high temperatures. To weld pieces of new and old track together, maintenance of way workers perform thermite welding, a fusion welding process in which two metals become bonded after being heated by superheated metal that has experienced an aluminothermic reaction. The process involves heating metal to temperatures as high as 4,500° F until it liquefies. When a 28-year-old maintenance of way worker died in Trevoise, Pennsylvania of heat stroke, his body temperature measured 108°F.²³ The gang was performing thermite welds on a 87°F day, but problems with the weld mold and a malfunctioning hi-rail vehicle required additional work, causing the shift to run long, and left the doomed worker on site without a break for longer than intended.²⁴

While falls are a hazard in all maintenance of way work, falls through holes or unsecured grating during bridge work are particular problems. Three of the 2013 fatalities were the result of falls, with one worker in Marianna, Florida falling only 14 1/2 feet but being subsequently

¹⁹ *Special Investigation Report*, *supra* n.16, at 6-7.

²⁰ *Id.*

²¹ *Heat Orders FAQ*, Virginia Railway Express, (2015) http://www.vre.org/feedback/frequently_asked_questions/faq_heat_orders.htm.

²² *Id.*

²³ *Special Investigation Report*, *supra* n.16, at 7-8.

²⁴ *Id.*

crushed when the 270 pound loose piece of walkway fell on top of him.²⁵ The use of telescopic boom lifts, aerial lift buckets, and ladders to reach bridges creates both further risks of falling and the hazards of coming in contact with overhead electrical and catenary wires situated under the bridge. A maintenance of way worker in Harpursville, New York was fatally electrocuted when the telescopic boom lift he was operating came into contact with an energized overhead power wire.²⁶ Two maintenance of way workers in Mathis, Texas were trying to disengage an aerial lift bucket stuck on a bolt when suddenly the bucket came free, accelerated upward unexpectedly, and tipped over the entire vehicle.²⁷ The first worker died and the second suffered serious injuries.²⁸

The use of cranes creates similar hazards. For the process of loading and unloading quarter-mile-long continuous-welded rail, which can weigh 25 tons or more, maintenance of way employees use cranes to lift and remove the old rail cut out of the track and to position the new rail sections. When cranes malfunction or make unexpected movements, maintenance of way workers can be struck by the crane or crushed by the falling rail, as was the case in a Washington, DC accident in 2013.²⁹

Even aside from the more hazardous aspects of the work, the regular operation of maintenance of way equipment takes a toll on the health of workers because of the continual exposure to chemicals, dust, fumes, noise in excess of 100 decibels, repetitive motion, and whole body vibration. In the process of laying down rail, ties, and ballast, workers are regularly exposed to creosote, hydraulic oils, silica dust, solvents, epoxy resins, pesticides, and lead. Many rail yards, which maintenance of way workers build, construct, inspect, repair, and access regularly for equipment, have been designated by the Environmental Protection Agency as “brownfields,” lands the use of which is complicated by the presence or potential presence of hazardous substances, pollutants, or contaminants.³⁰

All the specialized, heavy-duty machinery and heavy self-propelled vehicles necessary to move rail and ties, pull or drive spikes, distribute ballast, and line, surface, and gauge railroad track cannot function without transmitting whole-body vibration and shock to the workers operating those machines. If operated for a regular work shift, some of the routinely used railroad track maintenance vehicles give off shocks and jolts that exceed the current U.S. whole-body vibration thresholds established by the American Conference of Governmental Industrial Hygienists for an 8-hour exposure duration.³¹ Further, mechanical stressors such as these

²⁵ *Id.* at 11.

²⁶ *Id.* at 13-15.

²⁷ *Id.* at 16-17.

²⁸ *Id.*

²⁹ *Id.* at 31-32.

³⁰ *Successful Rail Property Cleanup and Redevelopment*, U.S. Environmental Protection Agency, 3 (August 2005), http://www.epa.gov/brownfields/policy/05_railfields.pdf.

³¹ Eckardt Johannings, *Vibration and shock exposure of maintenance-of-way vehicles in the railroad industry*, J. Applied Ergonomics, 2011, 42: 555-562, 562.

manifest in workers as early and accelerated degenerative spine diseases, back pain, and prolapsed discs.³²

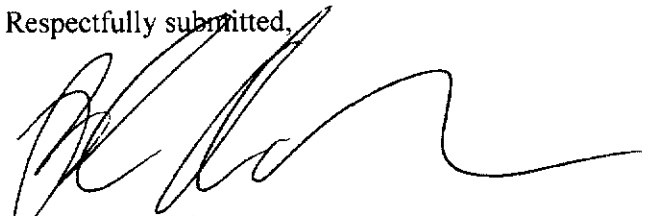
Likewise, the physical endurance of regularly lifting, carrying, pushing, and pulling tools and equipment can be punishing. In addition to loading and unloading quarter-mile-long continuous welded rail, maintenance of way workers regularly load and unload 100 pound kegs of bolts and spikes, 50 pound buckets of washers, joint bars weighing up to 40 pounds, and heavy wooden cross-ties and switch ties that weigh between 200 and 600 pounds. Accordingly, overexertion accounted for 397 injuries between January 2013 and December 2014. (Ex. C. at 6.)

IV. Conclusion

The BMWED greatly appreciates the opportunity to comment in advance of rule-making on issues relating to multiemployer plans and the excise tax under § 49801. BMWED members rely on their collectively bargained healthcare benefits to sustain the hazardous work they do building and rebuilding American railroads, so this is a topic of particular importance to BMWED. We look forward to commenting on additional issues as the guidance process continues.

If the Department of the Treasury and the Internal Revenue Service require any additional information or would like copies of any of the documents referred herein, please do not hesitate to contact us.

Respectfully submitted,

A large, stylized handwritten signature in black ink, likely belonging to Richard S. Edelman, is written over the "Respectfully submitted," text.

Richard S. Edelman
Paul A. Green
Olga Metelitsa
Attorneys for BMWED

³² *Id.* (internal citations omitted).

Exhibit A



Brotherhood of Maintenance of Way Employees Division of the International Brotherhood of Teamsters

Freddie N. Simpson
President

Perry K. Geller, Sr.
Secretary-Treasurer

STATEMENT OF DAVID JOYNT REGARDING TRACK CONSTRUCTION BY MAINTENANCE OF WAY WORKERS

My name is David Joynt and I was hired on what is now the Burlington Northern Santa Fe Railroad ("BNSF") on May 20, 1974 as a Track Laborer working on a Steel Gang. Since that time I have worked the positions of Machine Operator, Foreman, and Track Inspector for BNSF on Steel Gangs, Tie Gangs, Surfacing Gangs, Maintenance Gangs, Sled Gangs, and Section Gangs. I am now a Vice President for the Brotherhood of Maintenance of Way Employees Division, International Brotherhood of Teamsters ("BMWED"). As a Vice President, I represent members on many other railroads, including the Canadian National Railway, Canadian Pacific Railway, the Metra - Northeast Illinois Regional Commuter Railroad Co. in Chicago, IL, the Northern Indiana Commuter Transportation District in northern Indiana, the Union Pacific Railroad, the Toledo, Peoria and Western Railway, the Montana Rail Link, and the Lake Superior and Ishpeming Railroad.

I will outline in this letter, in general terms, the work performed by many of the Track Department gangs on the BNSF and other railroads with which I am familiar.

STEEL GANGS

A "Steel Gang" or "Rail Gang" is a "gang" of maintenance of way workers responsible for removing old rail and constructing new track by installing new rail. Modern rail installation involves bringing new rail in as quarter-mile "strings" so that there are no joints every thirty-nine feet like in the past. In most cases, a Rail Production Gang consists of approximately thirty-five members and includes Foremen, Assistant Foremen, Truck Drivers, Machine Operators, Laborers, Welders, and Grinder Operators. These large Rail Production Gangs travel across the United States over large territories of railroad and do the "production work" on larger projects. Additionally, smaller Section Gangs or Maintenance Gangs do the same rail production work on a smaller scale on the smaller sections of railroad line assigned to them, and they may also assist the large production gangs.

A Steel Gang rail relay project begins with the crew unloading the new quarter-mile long pieces of rail from flat cars that are specifically designed for hauling these long pieces of rail from the plant to the worksite. The rail is unloaded alongside the track where it is going to be installed. The crew also unloads other track material such as spikes or clips, anchors, and plates alongside the track in preparation for the Steel Gang coming through to install the new rail.

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www.bmwec.org



When the Steel Gang arrives, another gang must first remove the road crossings ahead of the Steel Gang to allow the old rail to be removed and new rail to be installed. Typically, the machines and equipment used by this gang are a crawler backhoe or a rubber tired backhoe, a boom truck, and hydraulic tools to remove the lags from the crossing. Sometimes, they must also use hydraulic jackhammers to remove the concrete or asphalt roadway on each side to allow the track to be raised and aligned properly.

The Steel Gang removes the spikes on wood ties and the clips from concrete ties that are holding the rail to the ties. There are also anchors on both sides of the tie, which are used to keep the rail from expanding or sliding, and must also be removed. The old rail is then removed from the track by a large crane and placed to the side of the track. The Steel Gang members then remove the old tie plates from the tie. On wood ties, the spike holes are plugged and the surface of the tie is smoothed by using a machine called an adzer that simply cuts or adzes off the top of the tie so there is a flat and level surface for the new plate to sit. On concrete ties, Steel Gang members may put a sealer on the tie under the plate along with a pad.

After the ties are prepared, Steel Gang members come along and place a new tie plate on the tie. Then the new rail is laid upon the new tie plates by another large crane. After the rail is laid in place on the ties, part of the Steel Gang “gages” the rail, making sure the rail is the exact correct distance from the other rail, and then the rail is either spiked down on wood ties or clipped down on concrete ties. The gang then de-stresses the rail by either heating it up in cold weather or cutting a small piece of rail out in hot weather. Then the anchors are reapplied to both sides of the tie to keep it from expanding, contracting, or sliding. Normally, a quality control crew then makes sure all spikes, plates, and anchors are properly applied.

A Section Gang or Maintenance Gang then reinstalls the road crossings that were removed. Replacing the crossing can mean putting in wood crossing planks, concrete slabs, or even asphaltting the crossing and the approaches. The Gang utilizes a crawler or rubber tired backhoe, or front-end loader, as well as a boom truck and hydraulic tools to reinstall the lag bolts that hold the crossing material in place.

A Welding Gang follows the Steel Gang to weld together the two quarter-mile pieces of rail so there are no joints, but continuous rail. This process is called thermite or boutet welding and involves heating materials to 3,500 degrees Fahrenheit to create molten metal that is poured into a form attached to the rail. The hot metal fills the gap between the rails creating one long continuous welded rail. A Grinder Operator then uses a large grinding machine to grind away the excess metal from the thermite or boutet weld.

Often, following directly behind a Steel Gang, is a Surfacing Gang that levels and straightens any track that may have been disturbed by the Steel Gang. The Surfacing Gang also ensures there is proper ballast back in the track and on the shoulders to keep the track from buckling in extremely hot weather. A Surfacing Gang normally employs three or four large machines that our members operate to ensure the track is smooth and straight. Also following the Steel Gang is another gang that picks up the old rail, the old spikes or clips, and the old tie plates.

All equipment mentioned here is operated by BMWED members and all work performed by BMWED members.

TIE GANGS

A "Tie Gang" is a gang of maintenance of way workers responsible for replacing old ties with new ties, whether they are wood ties or concrete ties. In most cases, a Tie Production Gang consists of approximately fifty to fifty-six members. It includes Foremen, Assistant Foremen, Truck Drivers, Machine Operators, Laborers, Welders, and Grinder Operators. These large Tie Production Gangs normally travel across the United States over large territories of railroad and do the "production work" on larger projects. Like with Steel Gangs, smaller Section Gangs and Maintenance Gangs can assist with tie production gang work, or perform tie replacement work on a smaller scale on the smaller sections of railroad line assigned to them.

Before the Tie Gang arrives, a Section Gang or Maintenance Gang, working with a machine on top of gondola cars loaded with ties, unloads the ties along the track where they are going to be installed. The same Gang will also unload spikes or clips at these locations in preparation for the Tie Gang. In addition, someone normally walks the territory where the ties are going to be replaced and marks the bad ties that need to be removed.

When the Tie Gang arrives, members of the Gang remove the spikes or clips in the front of the Gang. Then the anchors that are on each side of the tie are removed. A large machine operated by our members then removes the old tie from the track. Normally, a tie crane comes along and picks up the old ties and stacks them away from the work area. Laborers remove the tie plates from the work area and set them aside to be reused.

Next, a machine called a "scarfier" comes along and removes some of the old ballast from the hole where the old tie was removed to allow for easier insertion of the new tie. Next, another tie crane places the new tie, either on top of the rails or to the side of the track in the slot where the tie is going to be inserted, depending on the type of tie inserter. Then the tie inserter machine grabs the tie and inserts it under the rails in place where it belongs.

Following the tie inserter, a machine lifts the rail slightly so the tie plates can be put under the rails and on top of the new tie. The tamper machine then tamps ballast under the new tie so it is tight up against the bottom of the rail. Then the spikes or clips are reinserted, depending on whether there are concrete or wood ties. Following the spiker or clipper, the anchor adjuster/applicator places the anchors back on each side of the tie and squeezes them back up against the sides of the tie.

Following the anchor machines, a quality control or "deadheading" crew makes sure all the ties are spiked or clipped properly, that the anchors are on properly, and that the new ties are up tight against the rail. There is also a ballast regulator that makes sure there is adequate ballast in the middle of the track and on the ends of the ties to prevent the track from buckling in hot weather.

In almost all cases, a Surfacing Gang follows behind the Tie Gang and tamps ballast under each tie to make sure the track is level and straight. This usually requires a Section Gang

or Maintenance Gang to first remove the road crossings ahead of the Surfacing Gang and then to reinstall the crossing materials after the Surfacing Gang has raised and tamped through the crossing. Often, there is another gang following the Tie Gang to pick up and remove the old ties and any other materials left behind.

All equipment mentioned here is operated by BMWED members and all the work is performed by BMWED members.

SURFACING GANGS

A "Surfacing Gang" is a gang of maintenance of way workers responsible for ensuring the track is level and straight and the track bed is full of ballast. The machinery they use normally includes a production tamper, a support, chase, or "pup" tamper, a ballast regulator, and a stabilizer. The Surfacing Gang is made up of a Foreman, a Laborer, and a Truck Driver, with additional support from a Maintenance Gang or Section Gang.

Normally, before a Surfacing Gang arrives, a Maintenance Gang or Section Gang has already unloaded additional ballast from ballast cars onto the track where the Surfacing Gang will work. This provides the ballast needed to tamp under the ties and also to be placed on the ends of the ties following the Surfacing Gang to keep the track in place and from buckling in hot weather.

When a Surfacing Gang arrives, the Section or Maintenance Gang will remove road crossings ahead of the Surfacing gang to allow the Gang to raise and tamp through the crossings. Typically the machines and equipment used by this gang are a crawler backhoe, or a rubber tired backhoe, a boom truck, and hydraulic tools to remove the lags from the crossing. Sometimes they must also use hydraulic jackhammers to remove the concrete or asphalt roadway on each side to allow the track to be raised and aligned properly.

A Surfacing Gang production tamper raises the track slightly so it is level and aligns it so it is straight. Then the production tamper tamps ballast under the tie to keep it in the new position. Normally, the production tamper does this for every other tie, or every third tie, depending on the size of the rail, then the support, chase, or "pup" tamper tamps ballast under the ties skipped by the production tamper.

Following the support tamper is the ballast regulator that makes sure the track bed is full of ballast and there is adequate ballast around the ties to make sure the track stays in place, straight and smooth. The ballast regulator moves the ballast where needed and also has a broom attached to it that cleans the excess ballast off the ties so it looks nice and new and clean.

Following the ballast regulator, the track stabilizer machine creates a vibration that settles the track in place. This is supposed to be to the equivalent of ten trains running over the newly surfaced track. This process reduces the chance of the track buckling and eliminates or reduces the need for running trains at a slower speed over the recently disturbed track structure.

Once the Surfacing Gang goes through a crossing, the Section Gang or Maintenance Gang must replace the road crossings. Replacing the crossing can mean putting in wood

crossing planks, concrete slabs, or even asphaltting the crossing and the approaches. The Gang utilizes a crawler, rubber tired backhoe, or a front-end loader, as well as a boom truck, and hydraulic tools to reinstall the lag bolts to hold the crossing material in place.

All equipment mentioned here is operated by BMWED members and all work performed by BMWED members.

SECTION OR MAINTENANCE GANGS AND MOBILE GANGS

As is described above, in addition to working with these large, heavily mechanized gangs, Section or Maintenance Gangs may perform many of the same functions on a smaller scale on the smaller sections of the railroad assigned to them. Additionally, railroads may also utilize "mobile gangs" that are smaller than the big production gangs but perform many of the same tasks as the production gangs across section or seniority district lines but do not traverse regions or systems.

THE WORK ENVIRONMENT

Members of these Gangs work on live railroad tracks around heavy equipment, which creates a dangerous environment in which to work. Our members, whether operating the machines or working on the ground, must always be looking in all directions to make sure they are looking out for themselves and each other in case of trains passing on adjacent tracks at high rates of speed.

Our machine operators and our laborers are all exposed to long-term physical problems due to the repetitive actions of their jobs. Our members are exposed to constant and severe vibration from many of the tools and equipment they use on a daily basis. Many of our members suffer severe hearing loss from operating or working around this heavy equipment on a daily basis. Even when not operating a machine, members are working on the track or right of way on uneven surfaces and are always walking on large ballast or over and around materials. Thus, members are lifting and carrying heavy tools and material in awkward positions, which can result in imminent injury or long-term negative impact on their bodies.

Our members are also constantly exposed to environmental conditions that lead to sickness. For instance, in their regular daily work, members are inhaling all the silica dust from the ballast and creosote from the ties. Additionally, the railroads spray strong chemicals on their right of way to kill the weeds and member must work in the same area where the chemicals have been just used. Working in the maintenance of way craft on any railroad is very dangerous given all the severe conditions we are required to work in each and every day.

Respectfully,

A handwritten signature in black ink, appearing to read "David D. Joynt". The signature is fluid and cursive, with a long horizontal stroke at the end.

David D. Joynt
Vice President At-Large, BMWED
May 13, 2015

Exhibit B



Brotherhood of Maintenance of Way Employees Division of the International Brotherhood of Teamsters

Freddie N. Simpson
President

Perry K. Geller, Sr.
Secretary-Treasurer

STATEMENT OF DAVID R. SCOVILLE REGARDING BRIDGE AND BUILDING CONSTRUCTION BY MAINTENANCE OF WAY WORKERS

My name is David R. Scoville and I presently hold the position of Vice President, West Region of the Brotherhood of Maintenance of Way Employees Division, International Brotherhood of Teamsters. I assumed this office in September of 2014. Prior to my current position, I held the offices of Assistant General Chairman from July 2013 until September 2014, and Vice Chairman of the Unified System Division, formerly the Union Pacific System Division, from January 2006 until July 2013. Before assuming office in 2006, I worked for the Union Pacific Railroad in multiple capacities and within multiple Sub-Departments, including the Track Sub-Department, the Roadway Equipment Operator Sub-Department, and the Bridge and Building Sub-Department. As a result of my twenty-six years of maintenance of way experience and nearly ten years of representing those dedicated workers in the maintenance of way craft, I can say with confidence that the work, procedures, tasks, methods, and practices done by maintenance of way workers in Bridge and Building ("B&B") Sub-Departments across the nation are construction work and consistent with construction trade practices on similar projects.

Agreements between BMWED and carrier-employers require BMWED members to perform construction work. Rule 8 of the Collective Bargaining Agreement between the BMWED and the Union Pacific Railroad ("UP" or "Union Pacific") dated July 1, 2001, covering the original UP and commonly referenced as the "UP North," states as follows:

The work of construction, maintenance and repair of buildings, bridges, tunnels, wharves, docks non-portable car buildings, and other structures, turntables, platforms, walks, snow and sand fences, signs and similar structures as well as all appurtenances thereto, and other work generally so recognized by employees in the Bridge and Building Sub-Department.

Moreover, it cannot be overlooked that Union Pacific and other Class 1 railroad carriers go to great effort to train employees of the craft in construction practices and construction safety. Maintenance of way workers are taught both construction theory and practice at community colleges, trade schools, in-house facilities, and classrooms across the carriers' territories. Those workers within the B&B Sub-Department are taught structural welding, carpentry skills, and construction layouts for both buildings and bridges, for both wood and steel frames. They are taught concrete reinforcement and placement skills, along with the safety practices necessary for handling and assembling heavy structural components. They undergo practical training operating pile driving machines and high-capacity cranes. It is my understanding that Union Pacific employs a computer simulator to hone the skills of crane operators before they begin placing and driving bridge piling on new construction projects.

Dave Scoville
Vice President West Region

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Spokane Valley, WA 99214
Email: drscoville@bmwe.org

Office: 509-227-7295
Facsimile: 509-474-0386
Cell: 509-999-2284



The employees in the maintenance of way craft are also well-versed by the Carriers in the mandated safety practices for construction work. For example, there are strict training and personal protective equipment ("PPE") protocols surrounding the work of lead paint removal. These processes must be maintained throughout all steel replacement or rehabilitation work where the former components are covered with lead-based paints. Along with safety concerns for the hazards of exposure to lead-based fumes, there is equal concern for the hazards of exposure to the fumes released in the welding processes associated with new construction and rehabilitation work. Similar protocols are taught and enforced to maintain a safe working environment. The employees are also educated on confined space precautions, which must be put in place because the confined spaces contain hazardous atmospheres, material with the potential to engulf an entrant, irregular walls that converge inward and could trap or asphyxiate an entrant, unguarded machinery or exposed live wires, or the potential for heat to build. They are often required to work in confined spaces such as scale pits when performing periodic and heavy maintenance of steel structure and scale devices. B&B Sub-Department workers are therefore taught the hazards and protocols in identifying those hazards, as well as the methods of mitigating the hazards.

Any bridge or building construction also carries the potential for working at unsafe heights or over bodies of water. The PPE protocols and regulations involved in working at heights can be complicated, yet mandatory to maintaining a safe working environment. Employees within the craft are trained initially, then refreshed periodically on fall protection and fall retrieval. The practices and devices involved in fall protection are similar if not identical to those employed within the construction trades.

While many Class 1 railroad carriers have engaged maintenance of way workers to replace wood bridges on their territories with more durable structures, maintenance of way workers are still regularly called upon to repair existing wooden bridges to ensure the structures will hold up to the ever-increasing loading cycles of passing trains. Carpenter Gangs on every road change rotten or broken treated timbers in various awkward configurations. Employing the fall protection required, B&B Carpenters remove the rusty nuts and ship bolts from timbers that have been in place for decades. Using boom trucks, bridge cranes, speed swings and the like, they remove the old wood from below the rail deck and maneuver the new timbers into place, fastening them with care and working at bridge-level by the use of staging or man lift devices. The ties beneath the rails can only take so much weather and loading and therefore must be continually replaced. The safety procedures and work methods for doing so are similar whether individual ties are replaced as needed or ties are replaced en masse by building an entire new deck panel and then hoisting it into place with the locomotive crane. I personally worked on the structures described above as a B&B carpenter for over ten years.

The Carriers also utilize what are commonly referred to as "New Construction" Gangs. Within the B&B Sub-Department, these Gangs generally include structural welders, crane operators, machine operators, and laborers known as B&B mechanics or Steel Bridgemen. These Gangs are trained in all facets of bridge replacement, including the replacement of a wood bridge by a concrete or iron structure of typical engineered design. Employees assigned to these work groups know and understand the engineering and blueprints associated with the project.

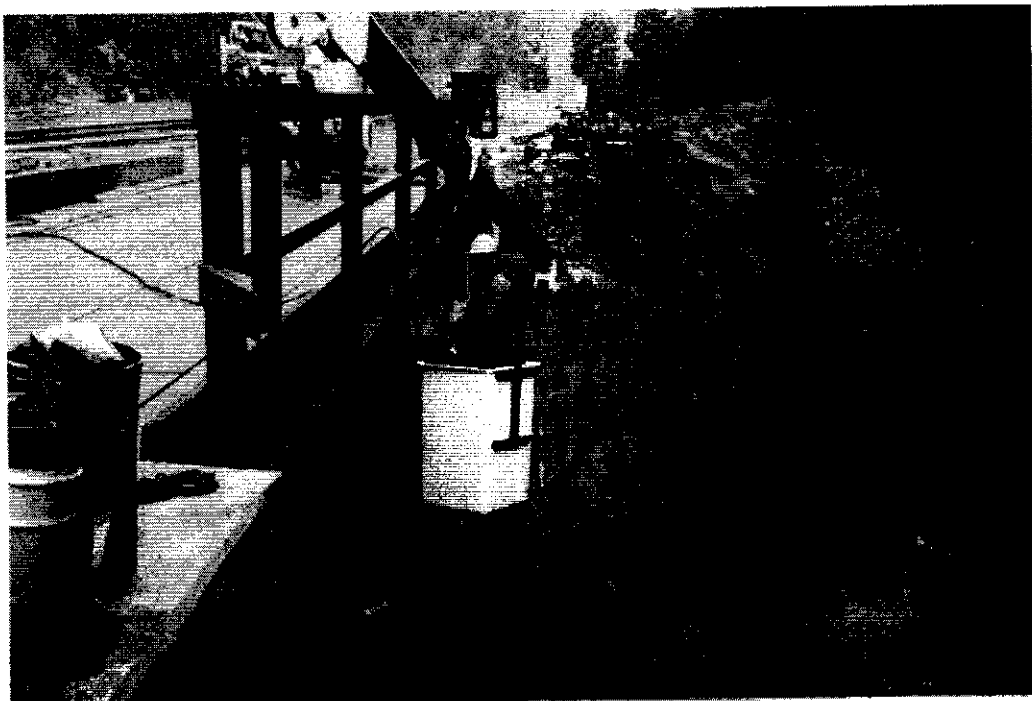
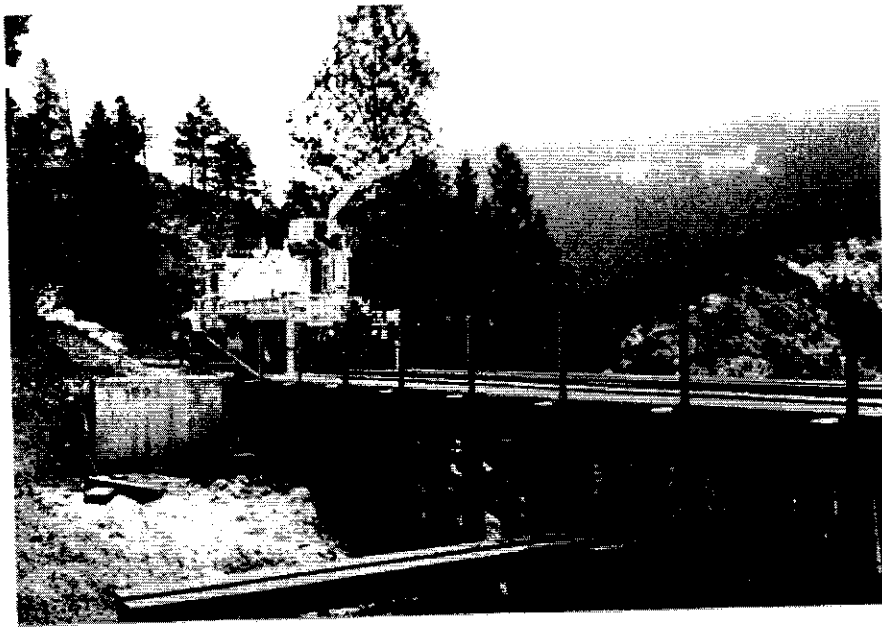
They are knowledgeable in iron assembly and fabrication, as well as concrete formwork, reinforcement, and placement. They employ the same work methods associated with highway construction. They are often working in the face of or adjacent to oncoming train traffic. B&B bridge builders must be cognizant of active tracks where a train can pass in any direction at any time. They must perform their work within windows called "track and time" or "curfews," getting themselves and their equipment out of the way for on-coming train traffic with little notice. More often than not, the New Construction Gangs build a new structure while the adjacent old structure is still in active use. They remove the old structure only when the new structure is ready to be cutover. To build the new structure, they drive piling of varying size and material, assemble forms for concrete back walls, tie rebar in place, install precast, or pour concrete bridge caps to support the girders which are then installed on the cutover day.

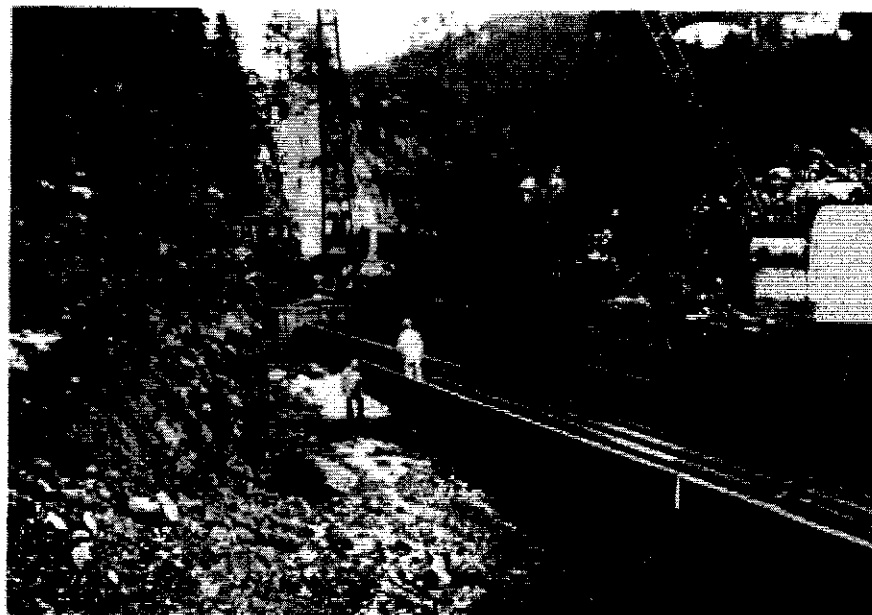
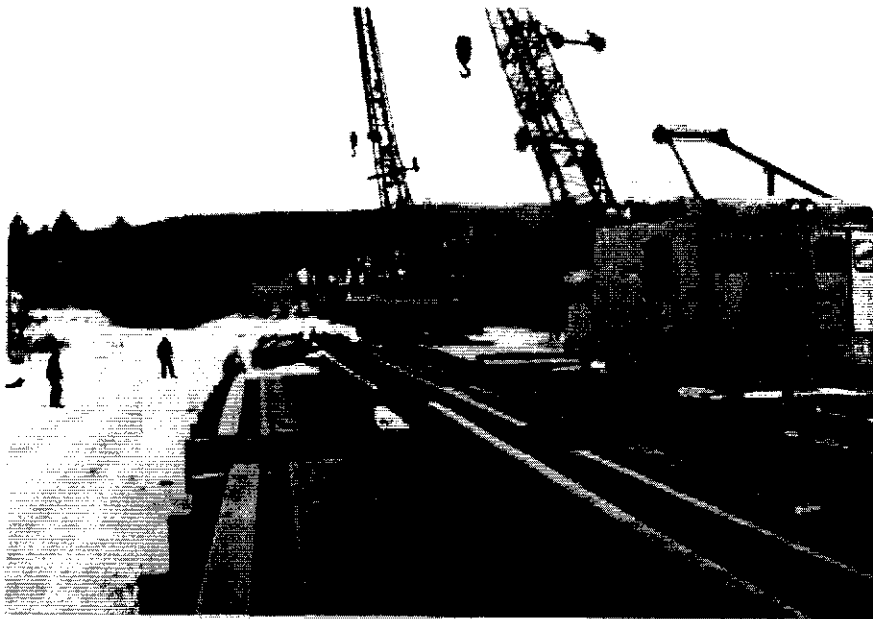
I have attached some examples of bridge projects I have personally been involved in over the years. From these photographs, it is clear that these maintenance of way projects are construction in the purest sense. This statement is true to the best of my knowledge and I hope it succinctly explains the nature of the work within the B&B Sub-Department.

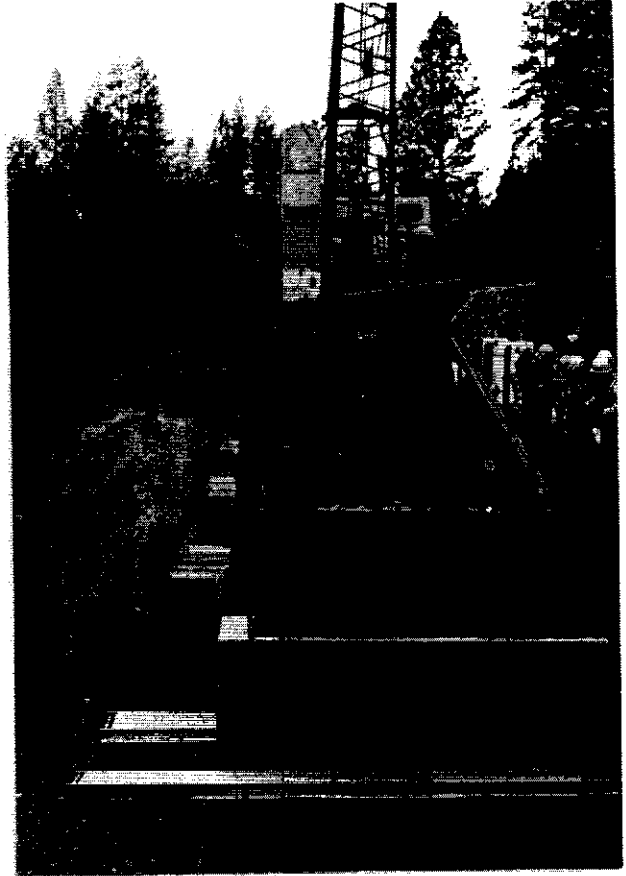
Respectfully,

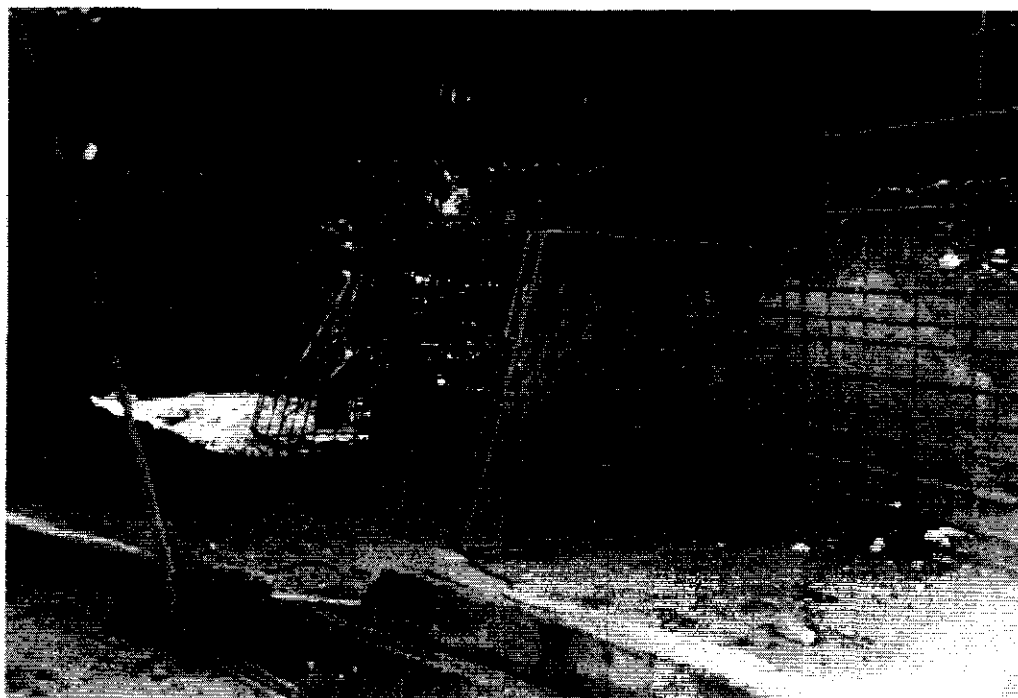
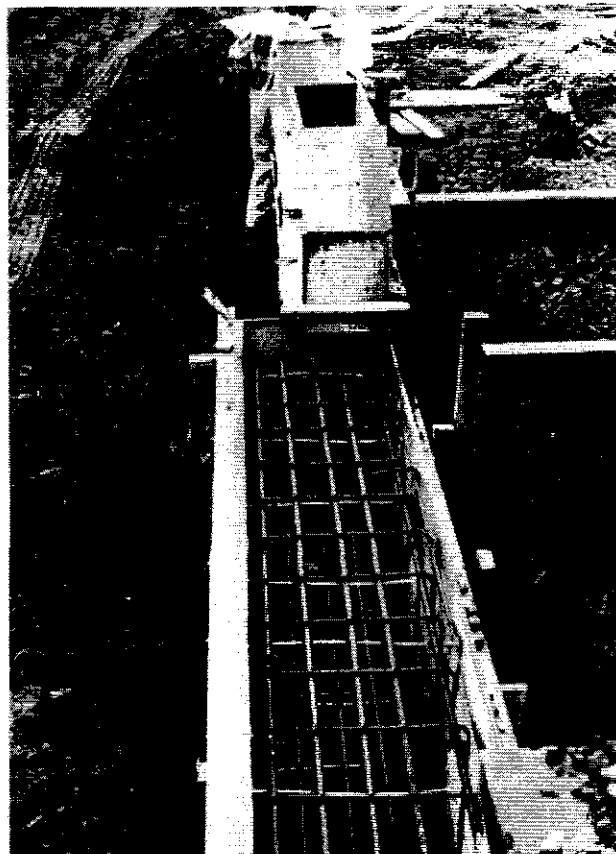
A handwritten signature in black ink, appearing to read "David R. Scoville". The signature is fluid and cursive, with the first name "David" being the most prominent.

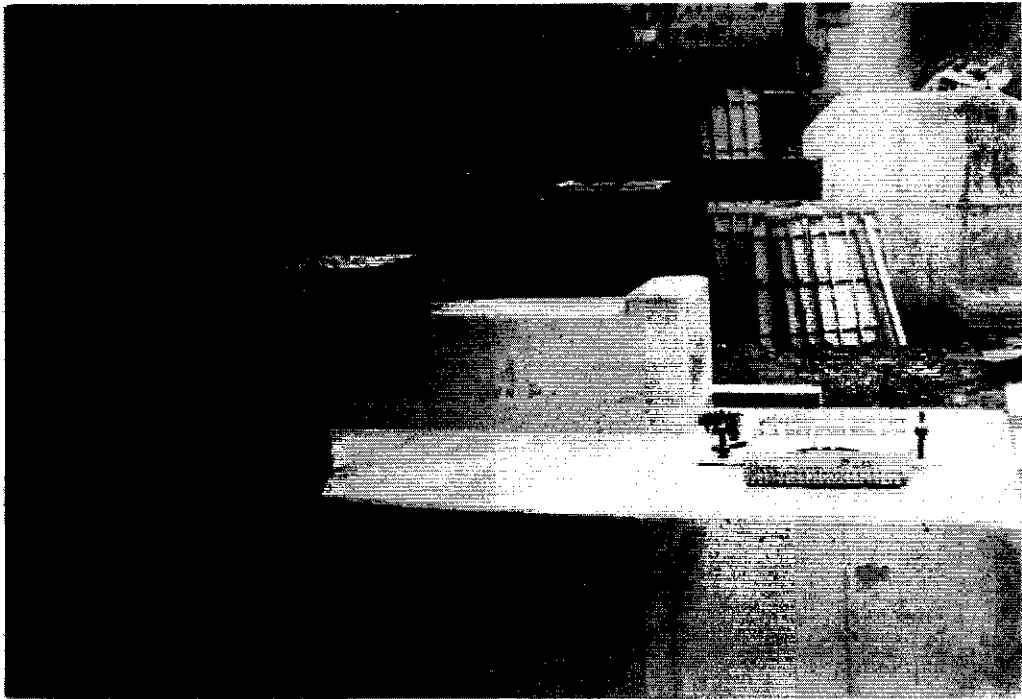
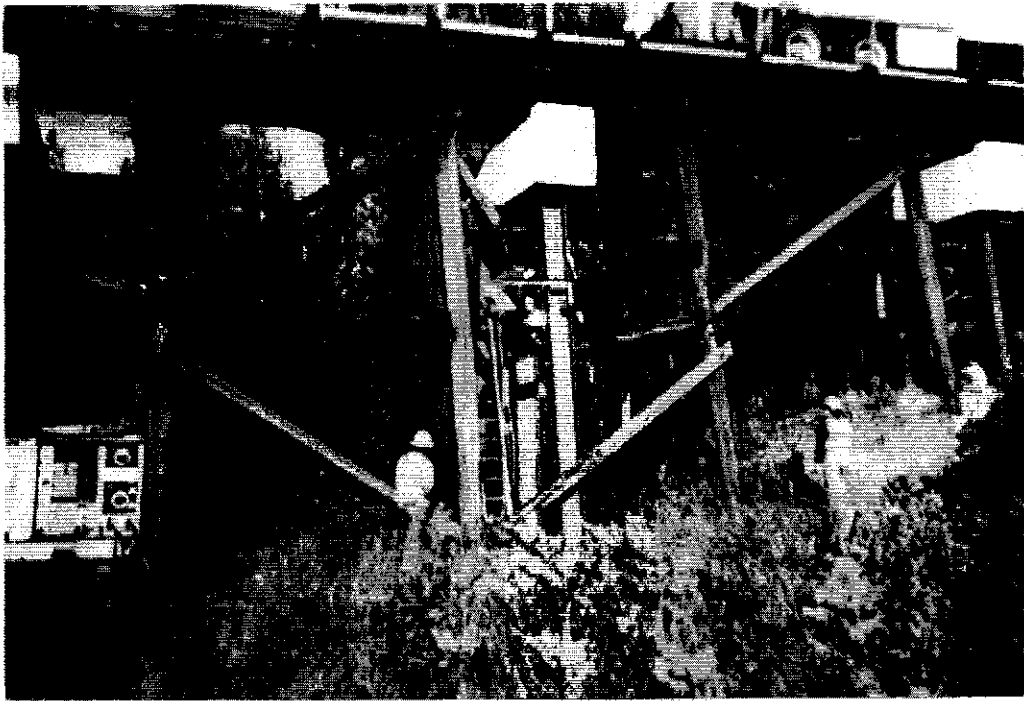
David R. Scoville
V. P. West Region BMWED
May 13, 2015











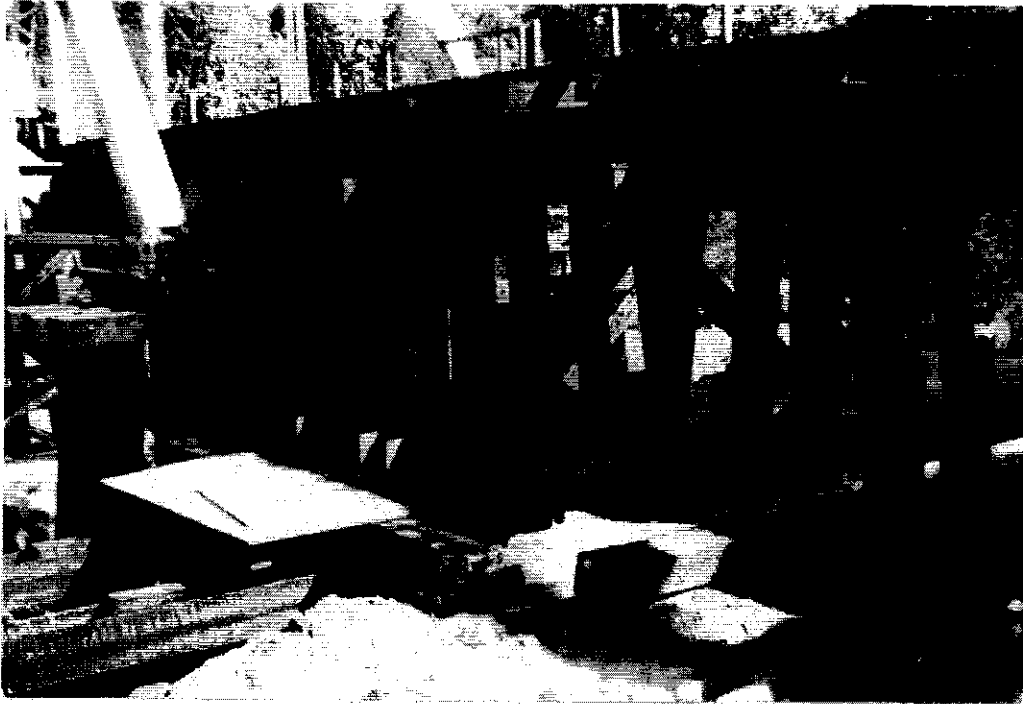


Exhibit C



Federal Railroad Administration Office of Safety Analysis

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4.09 - Worker Safety Report[Back to Query Page](#) [Print Version](#)**WORKER SAFETY REPORT - REPORTABLE CONDITIONS****Type of Job: Executives, Officials, and Staff Assistants**

Selections: Railroad - ALL

State - ALL County - ALL

Worker on duty - employee/ALL CASUALTIES

Time Frame - Jan 2013 To Dec 2014

Condition	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Bruise/contusion	40.0	30.0	1	1	0.0	0	0.0	0	0.0	0
Occ. Illness	10.0	0.0	0	-	-	0	0.0	0	0.0	0
Crushing injury	20.0	0.0	0	-	-	0	0.0	0	0.0	0
Sprain/Str., arm/hand	40.0	107.0	27	1	0.0	0	0.0	0	0.0	0
Sprain/Str., leg/foot	80.1	510.0	6	5	0.1	0	0.0	0	0.0	0
Sprain/Str., head/face	20.0	0.0	0	-	-	42	0.1	21	0.1	21
Sprain/Str., torso	80.1	308.0	1	39	0.1	0	0.0	0	0.0	0
Cut/abrasion	50.1	40.0	1	1	0.0	0	0.0	0	0.0	0
Fracture, arm/hand	30.0	140.0	5	1	0.0	27	0.1	9	0.1	9
Fracture, leg/foot	30.0	90.0	3	1	0.0	0	0.0	0	0.0	0
Rupture/tear, tendon, etc	20.0	366.0	183	2	0.0	8	0.0	4	0.0	4
Object in eye	10.0	0.0	0	-	-	0	0.0	0	0.0	0
Concussion	10.0	40.0	4	1	0.0	0	0.0	0	0.0	0
Internal injury	10.0	10.0	1	1	0.0	0	0.0	0	0.0	0
Unspecified injury	20.0	20.0	1	1	0.0	2	0.0	1	0.0	1
One-time exp.-fumes	10.0	30.0	3	1	0.0	0	0.0	0	0.0	0
All	480.6	872.0	2	18	0.3	79	0.2	2	0.2	2

Type of Job: Professional and Administrative

Selections: Railroad - ALL

State - ALL County - ALL

Worker on duty - employee/ALL CASUALTIES

Time Frame - Jan 2013 To Dec 2014

Condition	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Bruise/contusion	780.9	2,539	0.7	33	56	0.9	491	1.2	6	6
Occ. Illness	240.3	303	0.1	13	10	0.2	47	0.1	2	2
Sprain/Str., other	30.0	313	0.1	104	2	0.0	55	0.1	18	18
Sprain/Str., arm/hand	270.3	925	0.2	34	18	0.3	366	0.9	14	14
Sprain/Str., leg/foot	630.7	2,449	0.7	39	43	0.7	579	1.4	9	9
Sprain/Str., head/face	100.1	427	0.1	43	7	0.1	42	0.1	4	4
Sprain/Str., torso	971.1	5,559	1.5	57	75	1.2	583	1.4	6	6
Cut/abrasion	460.5	479	0.1	10	19	0.3	127	0.3	3	3
Puncture wound	30.0	21	0.0	7	1	0.0	0	0.0	0	0
Needle stick	10.0	0.0	0	-	-	-	0	0.0	0	0
Electric shock/burn	40.0	365	0.1	91	1	0.0	10	0.0	3	3
Other burn	30.0	13	0.0	4	1	0.0	0	0.0	0	0
Dislocation	10.0	0.0	0	-	-	-	0	0.0	0	0
Fracture, arm/hand	220.3	1,379	0.4	63	20	0.3	316	0.8	14	14
Fracture, leg/foot	130.1	616	0.2	47	8	0.1	135	0.3	10	10
Fracture, head/face	20.0	0.0	0	-	-	-	0	0.0	0	0
Fracture, torso	70.1	458	0.1	65	5	0.1	50	0.1	7	7
Rupture/tear, tendon, etc	100.1	1,330	0.4	133	9	0.1	227	0.6	23	23
Gunshot/knife wound	20.0	40	0.0	2	2	0.0	6	0.0	3	3
Animal/snake/insect bite	100.1	64	0.0	6	4	0.1	0	0.0	0	0
Amputation, arm/hand	10.0	140	0.0	14	1	0.0	35	0.1	35	35
Object in eye	40.0	30	0.0	1	1	0.0	0	0.0	0	0
Hernia	20.0	81	0.0	41	2	0.0	11	0.0	6	6
Concussion	50.1	83	0.0	17	5	0.1	0	0.0	0	0
Internal injury	30.0	59	0.0	20	2	0.0	15	0.0	5	5
Skin reaction	10.0	0.0	0	-	-	-	0	0.0	0	0
One-time exp. to noise	10.0	0.0	0	-	-	-	0	0.0	0	0
Unspecified injury	70.1	34	0.0	5	4	0.1	0	0.0	0	0

Condition	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
One-time exp.-fumes	60	0.1	2,170	0.1	36	5	0.1	25	0.1	4
All	456	5.2	17,735	4.7	39	301	5.0	3,120	7.6	7

Type of Job: Maintenance of Way and Structures

Selections: Railroad - ALL

State - ALL County - ALL

Worker on duty - employee/ALL CASUALTIES

Time Frame - Jan 2013 To Dec 2014

Condition	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Bruise/contusion	316	3.6	8,497	2.3	27	218	3.6	1,520	3.7	5
Occ. Illness	80	0.9	1,396	0.4	17	37	0.6	49	0.1	1
Crushing injury	35	0.4	1,157	0.3	33	25	0.4	120	0.3	3
Sprain/Str., other	18	0.2	855	0.2	48	12	0.2	55	0.1	3
Sprain/Str., arm/hand	79	0.9	2,157	0.6	27	51	0.8	775	1.9	10
Sprain/Str., leg/foot	230	2.6	10,752	2.9	47	179	3.0	1,601	3.9	7
Sprain/Str., head/face	66	0.8	1,612	0.4	24	43	0.7	248	0.6	4
Sprain/Str., torso	526	6.0	24,112	6.4	46	385	6.3	2,267	5.5	4
Cut/abrasion	311	3.6	4,170	1.1	13	135	2.2	583	1.4	2
Puncture wound	47	0.5	390	0.1	8	18	0.3	241	0.6	5
Needle stick	1	0.0	4	0.0	4	1	0.0	0	0.0	0
Electric shock/burn	11	0.1	580	0.2	53	8	0.1	2	0.0	0
Other burn	26	0.3	183	0.0	7	14	0.2	9	0.0	0
Dislocation	13	0.1	815	0.2	63	9	0.1	0	0.0	0
Fracture, arm/hand	102	1.2	4,527	1.2	44	70	1.2	997	2.4	10
Fracture, leg/foot	72	0.8	6,503	1.7	90	70	1.2	103	0.3	1
Fracture, head/face	12	0.1	843	0.2	70	10	0.2	6	0.0	1
Fracture, torso	17	0.2	1,301	0.3	77	15	0.2	186	0.5	11
Fracture, multiple	4	0.0	599	0.2	150	4	0.1	0	0.0	0
Rupture/tear, tendon, etc	64	0.7	6,209	1.7	97	58	1.0	533	1.3	8
Gunshot/knife wound	1	0.0	48	0.0	48	1	0.0	0	0.0	0
Animal/snake/insect bite	57	0.7	125	0.0	2	9	0.1	1	0.0	0
Dental related	20	0.2	609	0.2	30	6	0.1	1	0.0	0
Amputation, arm/hand	8	0.1	513	0.1	64	6	0.1	0	0.0	0
Amputation, leg/foot	1	0.0	180	0.0	180	1	0.0	0	0.0	0
Fatality	13	0.1	0	0.0	0	-	-	0	0.0	0
Object in eye	43	0.5	168	0.0	4	13	0.2	5	0.0	0
Hernia	20	0.2	774	0.2	39	16	0.3	51	0.1	3
Concussion	21	0.2	1,157	0.3	55	15	0.2	0	0.0	0
Internal injury	2	0.0	180	0.0	90	1	0.0	7	0.0	4
Skin reaction	5	0.1	188	0.1	38	3	0.0	0	0.0	0
One-time exp. to noise	1	0.0	90	0.0	90	1	0.0	0	0.0	0
Unspecified injury	21	0.2	775	0.2	37	14	0.2	64	0.2	3
One-time exp.-fumes	9	0.1	56	0.0	6	5	0.1	0	0.0	0
All	2,252	25.8	81,525	21.7	36	1,453	24.0	9,424	23.0	4

Type of Job: Maintenance of Equipment and Stores

Selections: Railroad - ALL

State - ALL County - ALL

Worker on duty - employee/ALL CASUALTIES

Time Frame - Jan 2013 To Dec 2014

Condition	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Bruise/contusion	270	3.1	11,051	2.9	41	210	3.5	1,618	3.9	6
Occ. Illness	46	0.5	1,224	0.3	27	14	0.2	28	0.1	1
Crushing injury	38	0.4	716	0.2	19	23	0.4	198	0.5	5
Sprain/Str., other	12	0.1	605	0.2	50	6	0.1	205	0.5	17
Sprain/Str., arm/hand	94	1.1	4,358	1.2	46	71	1.2	922	2.2	10
Sprain/Str., leg/foot	242	2.8	10,243	2.7	42	192	3.2	1,694	4.1	7
Sprain/Str., head/face	38	0.4	2,327	0.6	61	32	0.5	43	0.1	1
Sprain/Str., torso	441	5.1	24,954	6.6	57	348	5.7	3,029	7.4	7
Cut/abrasion	253	2.9	3,901	1.0	15	111	1.8	597	1.5	2
Puncture wound	24	0.3	55	0.0	2	7	0.1	11	0.0	0
Needle stick	23	0.3	205	0.1	9	3	0.0	0	0.0	0
Electric shock/burn	23	0.3	1,160	0.3	50	15	0.2	7	0.0	0
Other burn	29	0.3	890	0.2	31	20	0.3	0	0.0	0
Dislocation	11	0.1	332	0.1	30	8	0.1	37	0.1	3
Fracture, other	3	0.0	45	0.0	15	2	0.0	0	0.0	0
Fracture, arm/hand	71	0.8	4,478	1.2	63	51	0.8	822	2.0	12

Condition	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Fracture,leg/foot	34	0.4	3,211	0.9	94	33	0.5	114	0.3	3
Fracture,head/face	7	0.1	373	0.1	53	4	0.1	169	0.4	24
Fracture,torso	11	0.1	893	0.2	81	10	0.2	64	0.2	6
Fracture,multiple	1	0.0	180	0.0	180	1	0.0	0	0.0	0
Rupture/tear,tendon, etc	50	0.6	6,000	1.6	120	47	0.8	211	0.5	4
Animal/snake/insect bite	20	0.2	53	0.0	3	6	0.1	0	0.0	0
Dental related	11	0.1	6	0.0	1	1	0.0	0	0.0	0
Amputation,arm/hand	7	0.1	569	0.2	81	6	0.1	32	0.1	5
Amputation,leg/foot	2	0.0	139	0.0	70	2	0.0	0	0.0	0
Fatality	4	0.0	0	0.0	0	-	-	0	0.0	0
Object in eye	58	0.7	221	0.1	4	18	0.3	9	0.0	0
Hernia	11	0.1	745	0.2	68	11	0.2	92	0.2	8
Concussion	16	0.2	232	0.1	15	9	0.1	37	0.1	2
Internal injury	5	0.1	544	0.1	109	4	0.1	104	0.3	21
Skin reaction	15	0.2	87	0.0	6	6	0.1	0	0.0	0
One-time exp. to noise	6	0.1	33	0.0	6	2	0.0	0	0.0	0
Unspecified injury	22	0.3	884	0.2	40	13	0.2	0	0.0	0
One-time exp.-fumes	14	0.2	346	0.1	25	8	0.1	0	0.0	0
All	1,912	21.9	81,060	21.6	42	1,294	21.3	10,043	24.5	5

Type of Job: Transportation, Other Than Train and Engine

Selections: Railroad - ALL
State - ALL County - ALL
Worker on duty - employee/ALL CASUALTIES
Time Frame - Jan 2013 To Dec 2014

Condition	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Bruise/contusion	98	1.1	4,344	1.2	44	77	1.3	484	1.2	5
Occ. Illness	25	0.3	720	0.2	29	8	0.1	28	0.1	1
Crushing injury	10	0.0	30	0.0	3	1	0.0	0	0.0	0
Sprain/Str., other	20	0.0	70	0.0	4	2	0.0	29	0.1	15
Sprain/Str.,arm/hand	15	0.2	445	0.1	30	11	0.2	175	0.4	12
Sprain/Str.,leg/foot	46	0.5	3,060	0.8	67	40	0.7	50	0.1	1
Sprain/Str.,head/face	14	0.2	1,188	0.3	85	10	0.2	9	0.0	1
Sprain/Str.,torso	103	1.2	7,695	2.0	75	89	1.5	718	1.8	7
Cut/abrasion	34	0.4	721	0.2	21	22	0.4	252	0.6	7
Puncture wound	10	0.0	12	0.0	12	1	0.0	16	0.0	16
Needle stick	20	0.0	0	0.0	0	-	-	0	0.0	0
Electric shock/burn	10	0.0	365	0.1	365	1	0.0	0	0.0	0
Other burn	50	0.1	177	0.0	35	2	0.0	0	0.0	0
Dislocation	20	0.0	46	0.0	23	1	0.0	0	0.0	0
Fracture,arm/hand	50	0.1	307	0.1	61	2	0.0	26	0.1	5
Fracture,leg/foot	30	0.0	291	0.1	97	3	0.0	0	0.0	0
Fracture,head/face	10	0.0	108	0.0	108	1	0.0	0	0.0	0
Fracture,torso	70	0.1	937	0.2	134	7	0.1	0	0.0	0
Fracture,multiple	10	0.0	20	0.0	20	1	0.0	0	0.0	0
Rupture/tear,tendon, etc	20	0.0	261	0.1	131	2	0.0	0	0.0	0
Animal/snake/insect bite	13	0.1	209	0.1	16	7	0.1	0	0.0	0
Dental related	30	0.0	0	0.0	0	-	-	0	0.0	0
Object in eye	40	0.0	19	0.0	5	3	0.0	0	0.0	0
Hernia	10	0.0	180	0.0	180	1	0.0	0	0.0	0
Concussion	10	0.0	0	0.0	0	-	-	0	0.0	0
Internal injury	10	0.0	20	0.0	2	1	0.0	0	0.0	0
Skin reaction	10	0.0	13	0.0	13	1	0.0	0	0.0	0
One-time exp. to noise	10	0.0	20	0.0	2	1	0.0	0	0.0	0
Unspecified injury	60	0.1	120	0.0	2	4	0.1	41	0.1	7
One-time exp.-fumes	90	0.1	350	0.0	4	8	0.1	0	0.0	0
All	4084	7.2	21,179	5.6	52	307	5.1	1,828	4.5	4

Type of Job: Transportation, Train and Engine

Selections: Railroad - ALL
State - ALL County - ALL
Worker on duty - employee/ALL CASUALTIES
Time Frame - Jan 2013 To Dec 2014

Condition	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Bruise/contusion	517	5.9	18,253	4.9	35	390	6.4	1,497	3.7	3
Occ. Illness	248	2.8	3,464	0.9	14	69	1.1	85	0.2	0
Crushing injury	39	0.4	2,552	0.7	65	32	0.5	216	0.5	6

Condition	Total			Days Absent			Absent Cases			Days Restricted		
	Cnt	%		Cnt	%	Avg	Cnt	%		Cnt	%	Avg
Sprain/Str., other	70	0.8		5,211	1.4	74	61	1.0		649	1.6	9
Sprain/Str., arm/hand	186	2.1		10,431	2.8	56	145	2.4		1,476	3.6	8
Sprain/Str., leg/foot	622	7.1		29,036	7.7	47	521	8.6		3,892	9.5	6
Sprain/Str., head/face	109	1.2		5,651	1.5	52	86	1.4		304	0.7	3
Sprain/Str., torso	830	9.5		48,624	12.9	59	667	11.0		4,263	10.4	5
Cut/abrasion	260	3.0		6,046	1.6	23	147	2.4		463	1.1	2
Puncture wound	19	0.2		323	0.1	17	7	0.1		10	0.0	1
Needle stick	1	0.0		27	0.0	27	1	0.0		0	0.0	0
Electric shock/burn	9	0.1		248	0.1	28	6	0.1		0	0.0	0
Other burn	13	0.1		409	0.1	31	9	0.1		5	0.0	0
Dislocation	30	0.3		2,160	0.6	72	26	0.4		141	0.3	5
Fracture, other	3	0.0		14	0.0	5	2	0.0		10	0.0	3
Fracture, arm/hand	111	1.3		7,636	2.0	69	90	1.5		1,390	3.4	13
Fracture, leg/foot	84	1.0		7,782	2.1	93	79	1.3		486	1.2	6
Fracture, head/face	13	0.1		580	0.2	45	12	0.2		15	0.0	1
Fracture, torso	44	0.5		3,364	0.9	76	42	0.7		275	0.7	6
Fracture, multiple	4	0.0		671	0.2	168	4	0.1		0	0.0	0
Rupture/tear, tendon, etc	90	1.0		9,554	2.5	106	85	1.4		961	2.3	11
Gunshot/knife wound	1	0.0		135	0.0	135	1	0.0		0	0.0	0
Animal/snake/insect bite	49	0.6		128	0.0	3	16	0.3		4	0.0	0
Dental related	7	0.1		337	0.1	48	3	0.0		0	0.0	0
Amputation, arm/hand	5	0.1		310	0.1	62	4	0.1		0	0.0	0
Amputation, leg/foot	15	0.2		1,787	0.5	119	13	0.2		0	0.0	0
Fatality	7	0.1		0	0.0	0	-	-		0	0.0	0
Object in eye	32	0.4		408	0.1	13	15	0.2		0	0.0	0
Hernia	14	0.2		645	0.2	46	12	0.2		130	0.3	9
Concussion	39	0.4		2,310	0.6	59	34	0.6		127	0.3	3
Internal injury	6	0.1		472	0.1	79	4	0.1		0	0.0	0
Skin reaction	7	0.1		190	0.1	27	4	0.1		0	0.0	0
One-time exp. to noise	5	0.1		6	0.0	1	3	0.0		0	0.0	0
Unspecified injury	65	0.7		3,627	1.0	56	48	0.8		86	0.2	1
One-time exp.-fumes	92	1.1		1,207	0.3	13	50	0.8		30	0.1	0
All	3,646	41.8		173,598	46.2	48	2,688	44.3		16,515	40.3	5

WORKER SAFETY REPORT - EVENTS CAUSING

Type of Job: Executives, Officials, and Staff Assistants

Selections: Railroad - ALL

State - ALL County - ALL

Worker on duty - employee/ALL CASUALTIES

Time Frame - Jan 2013 To Dec 2014

Event/occurrence	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Bodily function/sudden movement, e.g., sneezing, twi	20.0	8.0	0.0	4	2	0.0	2	0.0	1	
Bumped	10.0	0.0	0.0	0	-	-	0	0.0	0	
Caught in/crushed by materials	10.0	0.0	0.0	0	-	-	0	0.0	0	
Caught, crushed, pinched, other	70.1	14.0	0.0	2	1	0.0	0	0.0	0	
Collision - between on track equipment	10.0	0.0	0.0	0	-	-	0	0.0	0	
Collision/impact - auto, truck, bus, van, etc.	20.0	26.0	0.0	13	1	0.0	42	0.1	21	
Defective/malfunctioning equipment	10.0	10.0	1	1	0.0	0	0.0	0	0	
Exposure to fumes - inhalation	10.0	30.0	3	1	0.0	0	0.0	0	0	
Exposure to noise over time	10.0	0.0	0.0	0	-	-	0	0.0	0	
Lost balance	30.0	132.0	0.0	44	1	0.0	0	0.0	0	
Overexertion	50.1	267.0	0.1	53	3	0.0	8	0.0	2	
Pushed/shoved into/against	20.0	20.0	1	1	0.0	0	0.0	0	0	
Ran into object/equipment	20.0	0.0	0.0	0	-	-	0	0.0	0	
Repetitive motion - typing, keyboard, etc.	10.0	0.0	0.0	0	-	-	0	0.0	0	
Slipped, fell, stumbled, other	60.1	363.0	0.1	61	5	0.1	27	0.1	5	
Slipped, fell, stumbled, etc. due to object, ballast,	20.0	30.0	0.0	15	2	0.0	0	0.0	0	
Slipped, fell, stumbled, etc. on oil, grease, etc.	20.0	26.0	0.0	13	2	0.0	0	0.0	0	
Stepped on object	20.0	0.0	0.0	0	-	-	0	0.0	0	
Struck against object	20.0	0.0	0.0	0	-	-	0	0.0	0	
Struck by falling object	30.0	0.0	0.0	0	-	-	0	0.0	0	
Struck by object	10.0	0.0	0.0	0	-	-	0	0.0	0	
All	480.6	872.0	0.2	18	20	0.3	79	0.2	2	

Type of Job: Professional and Administrative

Selections: Railroad - ALL

State - ALL County - ALL

Worker on duty - employee/ALL CASUALTIES

Time Frame - Jan 2013 To Dec 2014

Event/occurrence	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Aggravated pre-existing condition	10.0	180.0	0.0	180	1	0.0	0	0.0	0	
Apprehending/removing from property	340.4	8930.2	26	27	0.4	409	1.0	12		
Assaulted by other	200.2	668.0	0.2	33	14	0.2	74	0.2	4	
Bitten by animal	20.0	50.0	3	1	0.0	0	0.0	0	0	
Bitten/stung by bee, spider, other insect	80.1	590.0	7	3	0.0	0	0.0	0	0	
Blowing/falling debris	30.0	10.0	0	1	0.0	0	0.0	0	0	
Bodily function/sudden movement, e.g., sneezing, twi	80.1	467.0	0.1	58	6	0.1	162	0.4	20	
Bumped	10.0	10.0	1	1	0.0	30	0.1	30		
Burned	30.0	130.0	4	1	0.0	0	0.0	0	0	
Caught Between Equipment	20.0	00.0	0	-	-	35	0.1	18		
Caught Between Material	50.1	223.0	0.1	45	4	0.1	35	0.1	7	
Caught, crushed, pinched, other	130.1	299.0	0.1	23	4	0.1	53	0.1	4	
Climatic condition, exposure to environmental heat	10.0	00.0	0	-	-	-	0	0.0	0	
Collision - between on track equipment	10.0	00.0	0	-	-	-	0	0.0	0	
Collision/impact - auto, truck, bus, van, etc.	300.3	357.0	0.1	12	17	0.3	19	0.0	1	
Defective/malfunctioning equipment	20.0	00.0	0	-	-	-	0	0.0	0	
Deraiment	10.0	1040.0	0	1	0.0	0	0.0	0	0	
Electrical shock, other (explain in narrative)	40.0	365.0	0.1	91	1	0.0	10	0.0	3	
Exposure to chemicals - external	30.0	80.0	3	1	0.0	0	0.0	0	0	
Exposure to fumes - inhalation	80.1	229.0	0.1	29	6	0.1	25	0.1	3	
Exposure to noise - single incident	10.0	00.0	0	-	-	-	0	0.0	0	
Exposure to noise over time	70.1	00.0	0	-	-	-	0	0.0	0	
Highway-rail collision/impact	10.0	40.0	4	1	0.0	0	0.0	0	0	
Lost balance	150.2	526.0	0.1	35	14	0.2	8	0.0	1	
Needle puncture/prick/stick	10.0	00.0	0	-	-	-	0	0.0	0	
On track equipment, other incidents	10.0	40.0	4	1	0.0	0	0.0	0	0	
Other (describe in narrative)	250.3	878.0	0.2	35	17	0.3	69	0.2	3	
Overexertion	600.7	3,241.0	0.9	54	46	0.8	511	1.2	9	
Pushed/shoved onto	10.0	00.0	0	-	-	-	0	0.0	0	
Ran into object/equipment	10.0	10.0	1	1	0.0	0	0.0	0	0	
Repetitive motion - other (describe in narrative)	30.0	70.0	2	2	0.0	3	0.0	1		
Repetitive motion - typing, keyboard, etc.	30.0	00.0	0	-	-	-	0	0.0	0	
Repetitive motion - work processes	10.0	00.0	0	-	-	-	0	0.0	0	
Rubbed, abraded, etc.	60.1	130.0	2	2	0.0	0	0.0	0	0	

Event/occurrence	Total	Days Absent			Absent Cases			Days Restricted		
	Cnt %	Cnt	%	Avg.	Cnt	%		Cnt	%	Avg.
Shot	10.0	10.0	1		1	0.0		1	0.0	1
Slipped, fell, stumbled, etc. due to climatic cond	200.2	947	0.3	47	12	0.2		284	0.7	14
Slipped, fell, stumbled, other	400.5	1,393	0.4	35	30	0.5		240	0.6	6
Slipped, fell, stumbled, etc. due to irregular surface	210.2	1,234	0.3	59	15	0.2		150	0.4	7
Slipped, fell, stumbled, etc. due to object, ballast	200.2	1,673	0.4	84	18	0.3		98	0.2	5
Slipped, fell, stumbled, etc. on oil, grease, etc.	90.1	575	0.2	64	6	0.1		145	0.4	16
Stepped on object	10.0	620	0.0	62	1	0.0		0	0.0	0
Struck against object	180.2	594	0.2	33	12	0.2		229	0.6	13
Struck by falling object	70.1	232	0.1	33	3	0.0		55	0.1	8
Struck by object	260.3	1,207	0.3	46	16	0.3		232	0.6	9
Sudden, unexpected movement, other	100.1	561	0.1	56	8	0.1		63	0.2	6
Sudden/Unexpected Movement of tools	10.0	300	0.0	30	1	0.0		0	0.0	0
Sudden/unexpected movement of on-track equipment	10.0	180	0.0	180	1	0.0		0	0.0	0
Sudden/unexpected movement of material	10.0	180	0.0	180	1	0.0		180	0.4	180
Sudden/unexpected movement of vehicle	40.0	320	0.1	80	3	0.0		0	0.0	0
All	4565.2	17,735	4.7	39	301	5.0		3,120	7.6	7

Type of Job: Maintenance of Way and Structures

Selections: Railroad - ALL

State - ALL County - ALL

Worker on duty - employee/ALL CASUALTIES

Time Frame - Jan 2013 To Dec 2014

Event/occurrence	Total	Days Absent			Absent Cases			Days Restricted		
	Cnt %	Cnt	%	Avg.	Cnt	%		Cnt	%	Avg.
Aggravated pre-existing condition	14	0.2	525	0.1	38	12	0.2	1	0.0	0
Apprehending/removing from property	2	0.0	76	0.0	38	1	0.0	6	0.0	3
Assaulted by coworker	4	0.0	390	0.1	98	3	0.0	0	0.0	0
Assaulted by other	1	0.0	120	0.0	120	1	0.0	0	0.0	0
Bitten by animal	5	0.1	5	0.0	1	3	0.0	0	0.0	0
Bitten/stung by bee, spider, other insect	51	0.6	114	0.0	2	5	0.1	1	0.0	0
Blowing/falling debris	32	0.4	88	0.0	3	11	0.2	0	0.0	0
Bodily function/sudden movement, e.g., sneezing, twi	38	0.4	1,464	0.4	39	32	0.5	126	0.3	3
Bumped	10	0.1	81	0.0	8	3	0.0	40	0.1	4
Burned	23	0.3	198	0.1	9	11	0.2	6	0.0	0
Caught Between Equipment	9	0.1	656	0.2	73	4	0.1	18	0.0	2
Caught Between Machinery	4	0.0	49	0.0	12	2	0.0	10	0.0	3
Caught Between Material	17	0.2	408	0.1	24	10	0.2	81	0.2	5
Caught in/compressed by hand tools	22	0.3	190	0.1	9	8	0.1	16	0.0	1
Caught in/compressed by other machinery	13	0.1	445	0.1	34	8	0.1	14	0.0	1
Caught in/compressed by powered hand tools	7	0.1	187	0.0	27	3	0.0	0	0.0	0
Caught in/crushed by materials	28	0.3	1,104	0.3	39	21	0.3	210	0.5	8
Caught, crushed, pinched, other	89	1.0	2,280	0.6	26	48	0.8	247	0.6	3
Climatic condition, exposure to environmental cold	2	0.0	11	0.0	6	2	0.0	49	0.1	25
Climatic condition, exposure to environmental heat	19	0.2	149	0.0	8	11	0.2	0	0.0	0
Climatic conditions, other (e.g., high winds)	2	0.0	97	0.0	49	2	0.0	0	0.0	0
Collision - between on track equipment	46	0.5	2,989	0.8	65	36	0.6	123	0.3	3
Collision/impact - auto, truck, bus, van, etc.	125	1.4	3,740	1.0	30	84	1.4	525	1.3	4
Defective/malfunctioning equipment	9	0.1	113	0.0	13	7	0.1	0	0.0	0
Derailment	8	0.1	582	0.2	73	5	0.1	13	0.0	2
Electrical shock due to contact with 3rd rail, cat	3	0.0	156	0.0	52	3	0.0	0	0.0	0
Electrical shock from hand tool	1	0.0	0	0.0	0	-	-	0	0.0	0
Electrical shock while operating welding equipmen	1	0.0	2	0.0	2	1	0.0	0	0.0	0
Electrical shock, other (explain in narrative)	5	0.1	395	0.1	79	4	0.1	0	0.0	0
Exposure to chemicals - external	7	0.1	220	0.1	31	6	0.1	0	0.0	0
Exposure to fumes - inhalation	16	0.2	192	0.1	12	10	0.2	0	0.0	0
Exposure to noise - single incident	4	0.0	97	0.0	24	2	0.0	0	0.0	0
Exposure to noise over time	30	0.3	0	0.0	0	-	-	0	0.0	0
Exposure to poisonous plants	2	0.0	0	0.0	0	-	-	0	0.0	0
Exposure to welding light	3	0.0	13	0.0	4	3	0.0	0	0.0	0
Highway-rail collision/Impact	8	0.1	287	0.1	36	3	0.0	61	0.1	8
Horseplay, practical joke, etc.	1	0.0	50	0.0	50	1	0.0	0	0.0	0
Lost balance	53	0.6	2,301	0.6	43	39	0.6	119	0.3	2
Missed handhold, grabiron, step, etc.	5	0.1	415	0.1	83	4	0.1	28	0.1	6
Needle puncture/prick/stick	4	0.0	0	0.0	0	-	-	0	0.0	0
On track equipment, other incidents	5	0.1	162	0.0	32	3	0.0	0	0.0	0
Other (describe in narrative)	67	0.8	2,615	0.7	39	50	0.8	158	0.4	2
Other impacts - on track equipment	4	0.0	120	0.0	30	3	0.0	0	0.0	0
Overexertion	397	4.6	18,291	4.9	46	295	4.9	2,090	5.1	5
Pushed/shoved into/against	4	0.0	360	0.1	90	2	0.0	2	0.0	1
Pushed/shoved onto	1	0.0	0	0.0	0	-	-	0	0.0	0
Ran into object/equipment	3	0.0	52	0.0	17	2	0.0	0	0.0	0
Repetitive motion - other (describe in narrative)	5	0.1	68	0.0	14	3	0.0	54	0.1	11

Event/occurrence	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Repetitive motion - tools	19	0.2	707	0.2	37	11	0.2	122	0.3	6
Repetitive motion - work processes	24	0.3	948	0.3	40	14	0.2	102	0.2	4
Rubbed, abraded, etc.	18	0.2	390	0.1	22	9	0.1	1	0.0	0
Shot	1	0.0	48	0.0	48	1	0.0	0	0.0	0
Slipped, fell, stumbled, etc. due to climatic cond	66	0.8	3,598	1.0	55	46	0.8	182	0.4	3
Slipped, fell, stumbled, other	182	2.1	9,426	2.5	52	141	2.3	1,586	3.9	9
Slipped, fell, stumbled, etc. due to irregular surfac	65	0.7	2,794	0.7	43	48	0.8	1,022	2.5	16
Slipped, fell, stumbled, etc. due to object, ballast	93	1.1	5,499	1.5	59	66	1.1	508	1.2	5
Slipped, fell, stumbled, etc. on oil, grease, etc.	16	0.2	1,095	0.3	69	13	0.2	104	0.3	7
Stabbing, knifing, etc.	3	0.0	8	0.0	3	1	0.0	0	0.0	0
Stepped on object	18	0.2	519	0.1	29	12	0.2	12	0.0	1
Struck against object	61	0.7	1,603	0.4	26	40	0.7	343	0.8	6
Struck by Other Remote Control Locomotive	1	0.0	180	0.0	180	1	0.0	0	0.0	0
Struck by falling object	44	0.5	1,388	0.4	32	29	0.5	32	0.1	1
Struck by object	211	2.4	5,225	1.4	25	123	2.0	958	2.3	5
Struck by on-track equipment	19	0.2	978	0.3	51	11	0.2	19	0.0	1
Struck by thrown or propelled object	36	0.4	617	0.2	17	19	0.3	13	0.0	0
Sudden release of air	1	0.0	0	0.0	0	-	-	0	0.0	0
Sudden, unexpected movement, other	41	0.5	1,443	0.4	35	31	0.5	164	0.4	4
Sudden/Unexpected Movement of tools	63	0.7	1,068	0.3	17	24	0.4	137	0.3	2
Sudden/unexpected movement of on-track equipment	10	0.1	71	0.0	7	9	0.1	47	0.1	5
Sudden/unexpected movement of material	43	0.5	1,808	0.5	42	32	0.5	69	0.2	2
Sudden/unexpected movement of vehicle	8	0.1	251	0.1	31	5	0.1	5	0.0	1
All	2,252	25.881	52,521	21.7	36	1,453	24.0	9,424	23.0	4

Type of Job: Maintenance of Equipment and Stores

Selections: Railroad - ALL

State - ALL County - ALL

Worker on duty - employee/ALL CASUALTIES

Time Frame - Jan 2013 To Dec 2014

Event/occurrence	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Aggravated pre-existing condition	17	0.2	608	0.2	36	11	0.2	130	0.3	8
Assaulted by coworker	2	0.0	22	0.0	11	2	0.0	6	0.0	3
Assaulted by other	3	0.0	192	0.1	64	2	0.0	0	0.0	0
Bitten/stung by bee, spider, other insect	21	0.2	50	0.0	2	5	0.1	0	0.0	0
Blowing/falling debris	39	0.4	74	0.0	2	9	0.1	9	0.0	0
Bodily function/sudden movement, e.g., sneezing, twi	46	0.5	2,351	0.6	51	39	0.6	503	1.2	11
Bumped	9	0.1	21	0.0	2	2	0.0	27	0.1	3
Burned	32	0.4	1,168	0.3	37	24	0.4	0	0.0	0
Caught Between Equipment	18	0.2	945	0.3	53	14	0.2	138	0.3	8
Caught Between Machinery	3	0.0	381	0.1	127	3	0.0	14	0.0	5
Caught Between Material	20	0.2	614	0.2	31	16	0.3	147	0.4	7
Caught in/compressed by hand tools	17	0.2	100	0.0	6	7	0.1	243	0.6	14
Caught in/compressed by other machinery	9	0.1	306	0.1	34	6	0.1	33	0.1	4
Caught in/compressed by powered hand tools	6	0.1	4	0.0	1	1	0.0	48	0.1	8
Caught in/crushed by materials	20	0.2	744	0.2	37	10	0.2	102	0.2	5
Caught, crushed, pinched, other	84	1.0	2,986	0.8	36	58	1.0	433	1.1	5
Cave in, slide, etc.	1	0.0	0	0.0	0	-	-	0	0.0	0
Climatic condition, exposure to environmental heat	5	0.1	7	0.0	1	3	0.0	0	0.0	0
Climatic conditions, other (e.g., high winds)	4	0.0	6	0.0	2	1	0.0	0	0.0	0
Collision - between on track equipment	2	0.0	38	0.0	19	2	0.0	4	0.0	2
Collision/impact - auto, truck, bus, van, etc.	26	0.3	1,207	0.3	46	18	0.3	13	0.0	1
Defective/malfunctioning equipment	8	0.1	399	0.1	50	5	0.1	7	0.0	1
Derailment	1	0.0	180	0.0	180	1	0.0	0	0.0	0
Electrical shock due to contact with 3rd rail, cat	1	0.0	0	0.0	0	-	-	0	0.0	0
Electrical shock from hand tool	1	0.0	4	0.0	4	1	0.0	0	0.0	0
Electrical shock while operating welding equipmen	2	0.0	0	0.0	0	-	-	0	0.0	0
Electrical shock, other (explain in narrative)	15	0.2	1,029	0.3	69	10	0.2	7	0.0	0
Exposure to chemicals - external	24	0.3	382	0.1	16	12	0.2	0	0.0	0
Exposure to fumes - Inhalation	13	0.1	331	0.1	25	7	0.1	0	0.0	0
Exposure to noise - single incident	8	0.1	317	0.1	40	5	0.1	0	0.0	0
Exposure to noise over time	22	0.3	2	0.0	0	1	0.0	10	0.0	0
Exposure to poisonous plants	1	0.0	0	0.0	0	-	-	0	0.0	0
Exposure to welding light	1	0.0	3	0.0	3	1	0.0	0	0.0	0
Highway-rail collision/impact	1	0.0	180	0.0	180	1	0.0	0	0.0	0
Horseplay, practical joke, etc.	1	0.0	0	0.0	0	-	-	0	0.0	0
Lost balance	40	0.5	2,081	0.6	52	30	0.5	176	0.4	4
Missed handhold, grabiron, step, etc.	8	0.1	421	0.1	53	6	0.1	259	0.6	32
Needle puncture/prick/stick	26	0.3	409	0.1	16	5	0.1	0	0.0	0
On track equipment, other incidents	4	0.0	184	0.0	46	3	0.0	0	0.0	0
Other (describe in narrative)	76	0.9	2,116	0.6	28	47	0.8	247	0.6	3

Event/occurrence	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg	Cnt	%	Cnt	%	Avg
Other impacts - on track equipment	3	0.0	184	0.0	61	2	0.0	0	0.0	0
Overexertion	381	4.4	21,694	5.8	57	306	5.0	2,982	7.3	8
Pushed/shoved from	7	0.1	380	0.1	54	5	0.1	55	0.1	8
Pushed/shoved into/against	5	0.1	39	0.0	8	3	0.0	9	0.0	2
Pushed/shoved onto	1	0.0	4	0.0	4	1	0.0	57	0.1	57
Ran into object/equipment	5	0.1	36	0.0	7	3	0.0	0	0.0	0
Ran into on-track equipment	2	0.0	0	0.0	0	-	-	20	0.0	10
Repetitive motion - other (describe in narrative)	11	0.1	891	0.2	81	9	0.1	40	0.1	4
Repetitive motion - tools	5	0.1	211	0.1	42	3	0.0	128	0.3	26
Repetitive motion - work processes	15	0.2	759	0.2	51	9	0.1	165	0.4	11
Rubbed, abraded, etc.	11	0.1	14	0.0	1	2	0.0	29	0.1	3
Shot	2	0.0	0	0.0	0	-	-	0	0.0	0
Slipped, fell, stumbled, etc. due to climatic cond	60	0.7	3,702	1.0	62	45	0.7	289	0.7	5
Slipped, fell, stumbled, other	194	2.2	9,323	2.5	48	159	2.6	1,086	2.6	6
Slipped, fell, stumbled, etc. due to irregular surfac	48	0.6	2,756	0.7	57	38	0.6	71	0.2	1
Slipped, fell, stumbled, etc. due to object, ballast	74	0.8	5,505	1.5	74	56	0.9	457	1.1	6
Slipped, fell, stumbled, etc. on oil, grease, etc.	30	0.3	2,287	0.6	76	25	0.4	40	0.1	1
Stabbing, knifing, etc.	1	0.0	0	0.0	0	-	-	0	0.0	0
Stepped on object	17	0.2	520	0.1	31	13	0.2	81	0.2	5
Struck against object	99	1.1	2,288	0.6	23	65	1.1	517	1.3	5
Struck by falling object	39	0.4	1,806	0.5	46	29	0.5	272	0.7	7
Struck by object	124	1.4	2,758	0.7	22	65	1.1	360	0.9	3
Struck by on-track equipment	6	0.1	578	0.2	96	6	0.1	73	0.2	12
Struck by thrown or propelled object	10	0.1	186	0.0	19	6	0.1	11	0.0	1
Sudden release of air	3	0.0	4	0.0	1	1	0.0	0	0.0	0
Sudden, unexpected movement, other	39	0.4	2,362	0.6	61	28	0.5	134	0.3	3
Sudden/Unexpected Movement of tools	40	0.5	1,033	0.3	26	17	0.3	288	0.7	7
Sudden/unexpected movement of on-track equipment	5	0.1	327	0.1	65	4	0.1	179	0.4	36
Sudden/unexpected movement of material	23	0.3	829	0.2	36	16	0.3	89	0.2	4
Sudden/unexpected movement of vehicle	15	0.2	722	0.2	48	10	0.2	55	0.1	4
All	1,912	21.9	81,060	21.6	42	1,294	21.3	10,043	24.5	5

Type of Job: Transportation, Other Than Train and Engine

Selections: Railroad - ALL
State - ALL County - ALL
Worker on duty - employee/ALL CASUALTIES
Time Frame - Jan 2013 To Dec 2014

Event/occurrence	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg	Cnt	%	Cnt	%	Avg
Aggravated pre-existing condition	20.0	00.0	0	-	-	-	-	28	0.1	14
Assaulted by coworker	20.0	54	0.1	273	2	0.0	0	0.0	0	0
Assaulted by other	70.1	438	0.1	63	5	0.1	0	0.0	0	0
Bitten/stung by bee, spider, other insect	130.1	209	0.1	16	7	0.1	0	0.0	0	0
Blowing/falling debris	50.1	110	0.2	2	5	0.1	0	0.0	0	0
Bodily function/sudden movement, e.g., sneezing, twi	90.1	800	0.2	89	8	0.1	0	0.0	0	0
Bumped	30.0	391	0.1	130	3	0.0	0	0.0	0	0
Burned	50.1	177	0.0	35	2	0.0	0	0.0	0	0
Caught Between Equipment	100.1	220	0.1	22	7	0.1	56	0.1	6	6
Caught Between Material	50.1	95	0.0	19	4	0.1	26	0.1	5	5
Caught in/compressed by hand tools	30.0	240	0.0	8	3	0.0	0	0.0	0	0
Caught in/crushed by materials	10.0	40	0.0	4	1	0.0	7	0.0	7	7
Caught, crushed, pinched, other	80.1	184	0.0	23	6	0.1	60	0.1	8	8
Climatic condition, exposure to environmental cold	10.0	20	0.0	2	1	0.0	0	0.0	0	0
Collision/impact - auto, truck, bus, van, etc.	60.1	422	0.1	70	4	0.1	0	0.0	0	0
Committing vandalism/theft	10.0	180	0.0	180	1	0.0	0	0.0	0	0
Defective/malfunctioning equipment	10.0	138	0.0	138	1	0.0	0	0.0	0	0
Derailment	30.0	291	0.1	97	2	0.0	0	0.0	0	0
Electrical shock, other (explain in narrative)	10.0	365	0.1	365	1	0.0	0	0.0	0	0
Exposure to chemicals - external	20.0	300	0.0	15	2	0.0	0	0.0	0	0
Exposure to fumes - inhalation	60.1	260	0.0	4	5	0.1	0	0.0	0	0
Exposure to noise - single incident	10.0	20	0.0	2	1	0.0	0	0.0	0	0
Exposure to noise over time	110.1	00	0.0	0	-	-	0	0.0	0	0
Highway-rail collision/impact	150.2	1,557	0.4	104	14	0.2	29	0.1	2	2
Lost balance	60.1	81	0.0	14	3	0.0	86	0.2	14	14
Missed handhold, grabiron, step, etc.	10.0	20	0.0	2	1	0.0	3	0.0	3	3
Needle puncture/prick/stick	20.0	00	0.0	0	-	-	0	0.0	0	0
Other (describe in narrative)	190.2	412	0.1	22	11	0.2	10	0.0	1	1
Other impacts - on track equipment	20.0	100	0.0	5	2	0.0	0	0.0	0	0
Overexertion	530.6	2,943	0.8	56	43	0.7	534	1.3	10	10
Pushed/shoved from	30.0	280	0.1	93	2	0.0	0	0.0	0	0
Pushed/shoved into/against	70.1	390	0.1	56	4	0.1	123	0.3	18	18
Ran into object/equipment	20.0	120	0.0	60	2	0.0	0	0.0	0	0

Event/occurrence	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Repetitive motion - other (describe in narrative)	20.0		120.0	6		1	0.0	0.0	0	0
Repetitive motion - tools	10.0		180.0	180		1	0.0	0.0	0	0
Repetitive motion - typing, keyboard, etc.	10.0		00.0	0		-	-	0.0	0	0
Repetitive motion - work processes	90.1		917.0	102		9	0.1	36.0	1	4
Rubbed, abraded, etc.	10.0		00.0	0		-	-	0.0	0	0
Slipped, fell, stumbled, etc. due to climatic cond	140.2		733.0	52		9	0.1	31.0	1	2
Slipped, fell, stumbled, other	550.6		2,673.0	49		44	0.7	209.0	5	4
Slipped, fell, stumbled, etc. due to irregular surfac	140.2		1,041.0	74		13	0.2	8.0	0	1
Slipped, fell, stumbled, etc. due to object/ballast	40.0		445.0	111		4	0.1	0.0	0	0
Slipped, fell, stumbled, etc. on oil, grease, etc.	130.1		634.0	49		7	0.1	30.0	1	2
Stepped on object	10.0		60.0	6		1	0.0	0.0	0	0
Struck against object	350.4		1,303.0	37		29	0.5	455.1	13	13
Struck by falling object	120.1		1,210.0	101		11	0.2	0.0	0	0
Struck by object	170.2		1,064.0	63		14	0.2	97.0	2	6
Sudden release of air	10.0		00.0	0		-	-	0.0	0	0
Sudden, unexpected movement, other	40.0		387.0	97		4	0.1	0.0	0	0
Sudden/unexpected movement of on-track equipment	40.0		192.0	48		4	0.1	0.0	0	0
Sudden/unexpected movement of vehicle	30.0		33.0	11		3	0.0	0.0	0	0
Sustained viewing	10.0		00.0	0		-	-	0.0	0	0
All	4084.7		21,179.5	52		307	5.1	1,828.4	5	4

Type of Job: Transportation, Train and Engine

Selections: Railroad - ALL

State - ALL County - ALL

Worker on duty - employee/ALL CASUALTIES

Time Frame - Jan 2013 To Dec 2014

Event/occurrence	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg.	Cnt	%	Cnt	%	Avg.
Aggravated pre-existing condition	32.0	0.4	2,080.0	0.6	65	25	0.4	159.0	0.4	5
Assaulted by coworker	2.0	0.0	8.0	0.0	4	1	0.0	0.0	0.0	0
Assaulted by other	56.0	0.6	1,692.0	0.5	30	48	0.8	145.0	0.4	3
Bitten by animal	9.0	0.1	35.0	0.0	4	4	0.1	1.0	0.0	0
Bitten/stung by bee, spider, other insect	49.0	0.6	156.0	0.0	3	15	0.2	4.0	0.0	0
Blowing/falling debris	27.0	0.3	255.0	0.1	9	10	0.2	0.0	0.0	0
Bodily function/sudden movement, e.g., sneezing, twi	59.0	0.7	2,499.0	0.7	42	47	0.8	490.0	1.2	8
Bumped	24.0	0.3	1,025.0	0.3	43	16	0.3	13.0	0.0	1
Burned	7.0	0.1	251.0	0.1	36	4	0.1	0.0	0.0	0
Caught Between Equipment	39.0	0.4	909.0	0.2	23	23	0.4	315.0	0.8	8
Caught Between Material	6.0	0.1	345.0	0.1	58	6	0.1	59.0	0.1	10
Caught in/compressed by hand tools	1.0	0.0	127.0	0.0	127	1	0.0	0.0	0.0	0
Caught in/compressed by other machinery	8.0	0.1	349.0	0.1	44	7	0.1	0.0	0.0	0
Caught in/crushed by materials	7.0	0.1	406.0	0.1	58	6	0.1	91.0	0.2	13
Caught, crushed, pinched, other	104.0	1.2	3,584.0	1.0	34	75	1.2	679.0	1.7	7
Cave in, slide, etc.	1.0	0.0	154.0	0.0	154	1	0.0	0.0	0.0	0
Climatic condition, exposure to environmental cold	9.0	0.1	222.0	0.1	25	8	0.1	0.0	0.0	0
Climatic condition, exposure to environmental heat	22.0	0.3	277.0	0.1	13	17	0.3	0.0	0.0	0
Climatic conditions, other (e.g., high winds)	4.0	0.0	15.0	0.0	4	1	0.0	34.0	0.1	9
Collision - between on track equipment	69.0	0.8	5,421.0	1.4	79	59	1.0	89.0	0.2	1
Collision/impact - auto, truck, bus, van, etc.	150.0	1.7	6,723.0	1.8	45	116	1.9	479.0	1.2	3
Defective/malfunctioning equipment	46.0	0.5	3,172.0	0.8	69	37	0.6	83.0	0.2	2
Derailment	61.0	0.7	5,018.0	1.3	82	50	0.8	286.0	0.7	5
Electrical shock, other (explain in narrative)	8.0	0.1	248.0	0.1	31	6	0.1	0.0	0.0	0
Exposure to chemicals - external	5.0	0.1	8.0	0.0	2	3	0.0	0.0	0.0	0
Exposure to fumes - inhalation	97.0	1.1	1,466.0	0.4	15	55	0.9	27.0	0.1	0
Exposure to noise - single incident	5.0	0.1	6.0	0.0	1	3	0.0	0.0	0.0	0
Exposure to noise over time	158.0	1.8	0.0	0.0	0	-	-	0.0	0.0	0
Exposure to welding light	1.0	0.0	0.0	0.0	0	-	-	0.0	0.0	0
Highway-rail collision/impact	111.0	1.3	7,420.0	2.0	67	86	1.4	353.0	0.9	3
Lost balance	99.0	1.1	4,644.0	1.2	47	78	1.3	1,156.0	2.8	12
Missed handhold, grabiron, step, etc.	28.0	0.3	1,391.0	0.4	50	21	0.3	338.0	0.8	12
Needle puncture/prick/stick	4.0	0.0	28.0	0.0	7	2	0.0	0.0	0.0	0
On track equipment, other incidents	15.0	0.2	548.0	0.1	37	12	0.2	99.0	0.2	7
Other (describe in narrative)	160.0	1.8	8,299.0	2.2	52	121	2.0	875.0	2.1	5
Other impacts - on track equipment	27.0	0.3	2,276.0	0.6	84	26	0.4	81.0	0.2	3
Overexertion	573.0	6.6	32,571.0	8.7	57	467	7.7	3,216.0	7.8	6
Pushed/shoved from	6.0	0.1	401.0	0.1	67	6	0.1	0.0	0.0	0
Pushed/shoved into/against	16.0	0.2	736.0	0.2	46	13	0.2	27.0	0.1	2
Pushed/shoved onto	1.0	0.0	11.0	0.0	11	1	0.0	0.0	0.0	0
Ran into object/equipment	7.0	0.1	188.0	0.1	27	3	0.0	0.0	0.0	0
Ran into on-track equipment	5.0	0.1	383.0	0.1	77	3	0.0	2.0	0.0	0
Repetitive motion - other (describe in narrative)	10.0	0.1	442.0	0.1	44	7	0.1	36.0	0.1	4
Repetitive motion - tools	1.0	0.0	4.0	0.0	4	1	0.0	126.0	0.3	126

Event/occurrence	Total		Days Absent			Absent Cases		Days Restricted		
	Cnt	%	Cnt	%	Avg	Cnt	%	Cnt	%	Avg
Repetitive motion - work processes	17	0.2	812	0.2	48	15	0.2	127	0.3	7
Rubbed, abraded, etc.	11	0.1	226	0.1	21	6	0.1	10	0.0	1
Shot	1	0.0	1	0.0	1	1	0.0	0	0.0	0
Slack action, draft, compressive buff/coupling	27	0.3	1,681	0.4	62	17	0.3	74	0.2	3
Slack adjustment during switching operation	22	0.3	1,346	0.4	61	14	0.2	111	0.3	5
Slipped, fell, stumbled, etc. due to climatic cond	174	2.0	8,872	2.4	51	141	2.3	1,201	2.9	7
Slipped, fell, stumbled, other	358	4.1	21,021	5.6	59	295	4.9	1,719	4.2	5
Slipped, fell, stumbled, etc. due to irregular surfac	100	1.1	5,007	1.3	50	86	1.4	803	2.0	8
Slipped, fell, stumbled, etc. due to object, ballast	195	2.2	11,462	3.0	59	161	2.7	888	2.2	5
Slipped, fell, stumbled, etc. on oil, grease, etc.	51	0.6	2,714	0.7	53	43	0.7	221	0.5	4
Stabbing, knifing, etc.	1	0.0	0	0.0	0	-	-	0	0.0	0
Stepped on object	64	0.7	1,926	0.5	30	46	0.8	384	0.9	6
Struck against object	129	1.5	4,427	1.2	34	85	1.4	212	0.5	2
Struck by falling object	25	0.3	1,030	0.3	41	18	0.3	97	0.2	4
Struck by object	123	1.4	4,943	1.3	40	86	1.4	298	0.7	2
Struck by on-track equipment	19	0.2	834	0.2	44	17	0.3	0	0.0	0
Struck by thrown or propelled object	5	0.1	16	0.0	3	3	0.0	0	0.0	0
Sudden release of air	12	0.1	393	0.1	33	12	0.2	51	0.1	4
Sudden, unexpected movement, other	59	0.7	3,511	0.9	60	49	0.8	283	0.7	5
Sudden/Unexpected Movement of tools	10	0.1	401	0.1	40	3	0.0	9	0.0	1
Sudden/unexpected movement of on-track equipment	80	0.9	5,501	1.5	69	71	1.2	403	1.0	5
Sudden/unexpected movement of material	11	0.1	552	0.1	50	10	0.2	173	0.4	16
Sudden/unexpected movement of vehicle	19	0.2	1,076	0.3	57	16	0.3	188	0.5	10
Sustained viewing	4	0.0	53	0.0	13	2	0.0	0	0.0	0
All	3,646	41.8	173,598	46.2	48	2,688	44.3	16,515	40.3	5

Event codes replaced occurrence codes in 1997