Issued: June 25, 2025 Railroad Investigation Report: RIR-25-08

Union Pacific Railroad Train Collision and Conductor Fatality

Location	Melrose Park, Illinois
Date	July 6, 2024
Accident type	Raking collision
Striking train	Union Pacific freight train MCBCH-05 2 crewmembers 1 locomotive, 45 railcars
Departing train	Union Pacific freight train MPRNL-06 2 crewmembers 2 locomotives, 91 railcars
Track	Yard, other than main track
Hazardous materials	None
Fatalities	1
Injuries	0
Damages	$89,000

Summary

On July 6, 2024, about 1:36 a.m. local time, a Union Pacific Railroad (UP) conductor was killed in a raking collision while protecting a shoving movement at UP's Proviso Yard in Melrose Park, Illinois.[1] At the time of the accident, eastbound train MPRNL-06 was traveling along the South Melrose Track out of Proviso Yard 4. At the same time, train MCBCH-05 was shoving west on the City Lead Track, which merges with South Melrose Track. The conductor of train MCBCH-05 was positioned on the leading end of a tank car when it struck the right side of train MPRNL-06.[2]

[1] (a) Visit ntsb.gov to find additional information in the public docket for this National Transportation Safety Board (NTSB) accident investigation (case number RRD24LR013), including detailed factual reports about the circumstances of the accident. (b) *Shoving* is the process of pushing railcars or a train from the rear with a locomotive. (c) A *raking collision* is a collision between parts or lading of a consist on an adjacent track or with a structure such as a bridge.

[2] Throughout this brief, train MCBCH-05 will be commonly referred to as the *striking train*, and train MPRNL-06 will be commonly referred to as the *departing train*.

The striking train arrived at City Lead Track around 12:45 a.m., stopped movement, and radioed the Proviso Yard controller to await further instruction.[3] Shortly after, the Proviso Yard controller provided a job briefing to the two-person crew and instructed them to shove west down City Lead Track—a connecting track that merges with the South Melrose Track—and wait at the designated stopping point before entering Proviso Yard 4. (See figure 1.) As the crew of the striking train was receiving instructions from the yard controller, the departing train was simultaneously leaving Proviso Yard 4, pulling east on the South Melrose Track. The striking train was approved to shove into the yard and tie down after the departing train was safely clear of the merging point at City Lead Track and South Melrose Track.[4]

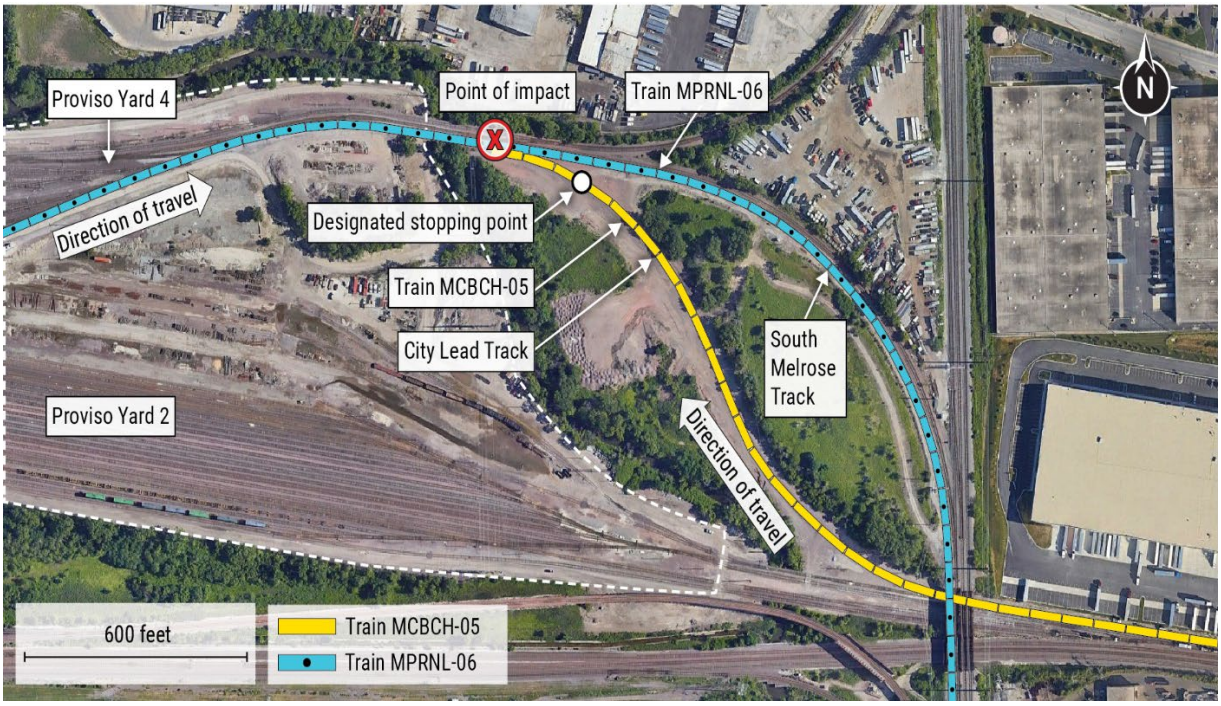

Figure 1. An aerial view of the accident site.

During his interview, the engineer of the striking train stated that, upon hearing the yard controller's instructions for shoving into the yard, he informed the yard controller that the striking train conductor had never led a shoving movement at Proviso Yard, that he was not adequately acquainted with the yard territory, and that he had never traversed the City Lead Track. Because of this concerning lack of territorial

[3] A *yard controller* is responsible for managing the movement of trains within a yard.

[4] *Tie down* refers to a train temporarily stopping at a specific location.

knowledge and experience leading shoving movements at Proviso Yard, the engineer of the striking train informed the yard controller that the assistance of the Proviso Yard utility conductor was requested to safely make the shoving movement.[5] The striking train engineer then stated that, in response to the request for assistance, the yard controller informed the striking train crew that the utility conductor was currently assisting the departing train and instructed them to "do what you can do. . . the conductor can walk the City Lead [Track] or shove. . . do what you can do."

According to the striking train engineer's interview with NTSB investigators, once the yard controller finished his briefing, the engineer of the striking train proceeded to conduct a more detailed briefing with the conductor, which included reviewing maps of the yard and pointing out territorial details of importance such as switch locations, as a means of helping the conductor to familiarize himself with the area before carrying out the shoving movement. Once the striking train crew completed the briefing, the conductor chose to mount the rear tank car and ride the shoving movement to the designated stopping point and waited for the departing train to clear the merging point. About 1:19 a.m., the striking train began shoving northwest up an incline with multiple curves on the City Lead Track. The conductor was riding on a tank car at the leading end of the movement and providing updates on the progression of the train to the engineer with a handheld radio.[6] Specifically, the conductor was responsible for visually estimating how far the train could continue traveling before stopping, which he did by providing car counts (a car count refers to 1 railcar length or about 50 feet). The conductor gave a final car count of "5 CB" followed by "Stop CB" 20 seconds later.[7] At 1:36 a.m., just as the conductor made his last radio transmission, the striking train traversed beyond the designated stopping point at the top of the hill and collided with the departing train. The striking train was traveling about 3.7 miles per hour when it hit

[5] A *utility conductor* is a rail worker who performs a variety of tasks related to train operations, acting as a flexible, territorially qualified member of the yard crew to fill in where required.

[6] A crewmember controls a shoving movement by giving instructions to the engineer while positioned at the leading end of the train; UP follows the standards and operating procedures put forth in the General Code of Operating Rules (GCOR). GCOR 6.28 requires train crews to operate at a speed that allows them to stop within half the range of vision short of a train, engine, railroad car, men, or equipment fouling the track, stop signal, derail, or switch that is lined improperly while operating anywhere other than main tracks.

[7] When the conductor calls out a number followed by *"CB"* (*e.g., 5 CB*), he is providing a number of counted railcars (*i.e., 5*) as well as the train identifier (*i.e., CB*). In this case, *CB* stands for *Council Bluffs*. The conductor has to give positive communication to make sure the engineer knows the transmission is intended for him.

the 65th through 68th cars of the departing train, derailed the 67th and 68th cars, and killed the striking train conductor.

Postaccident sight distance observations demonstrated that a train pulling east on the South Melrose Track at the time of the accident would have been visible to a train making a shoving movement at 3.7 miles per hour up City Lead Track prior to traversing the designated stopping point. (See figure 2.)

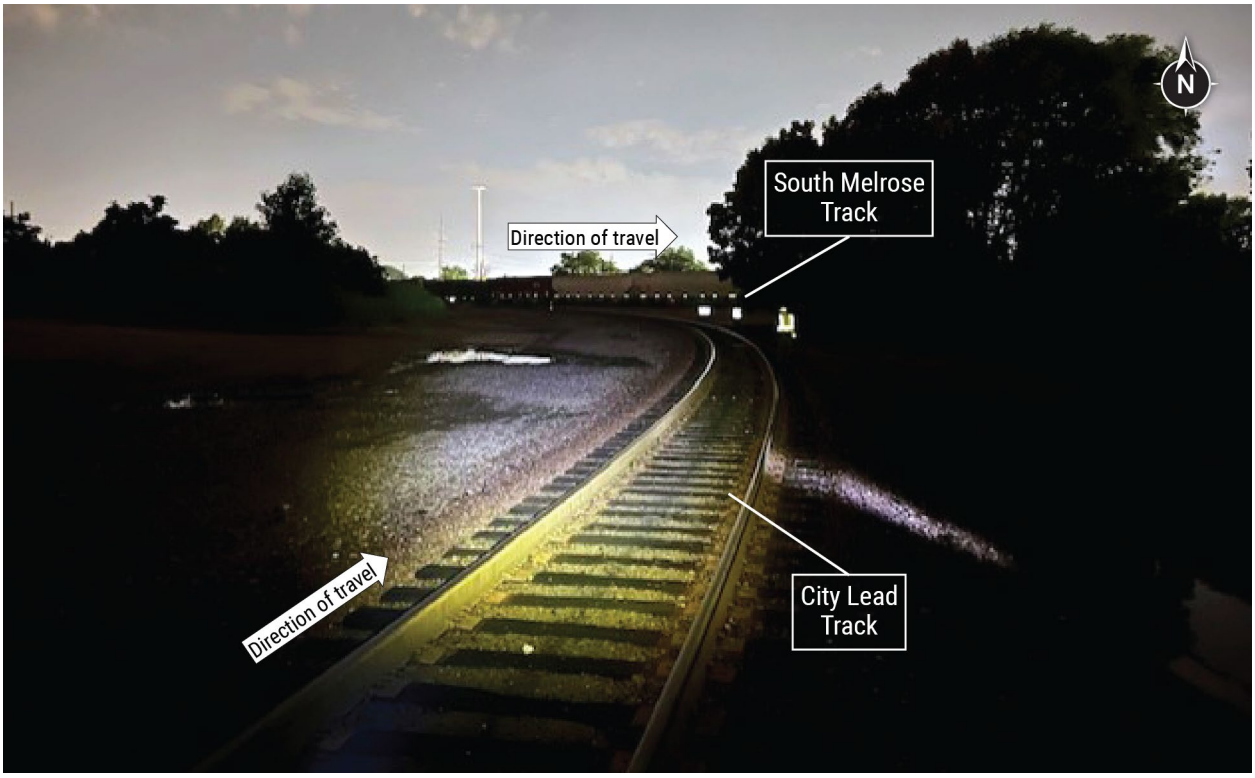

Figure 2. A postaccident sight distance observation image of the City Lead Track demonstrating visual range as it would have been during the accident.

Analysis

The raking collision, and the subsequent death of the striking train conductor, resulted from the train shoving past its designated stopping point. The conductor did not alert the engineer in time to safely stop the train from traversing the track and colliding with the departing train.

The striking train conductor had only been certified since June 24, 2024—just 12 days before the accident. The conductor served as the lead of a shoving movement only five times before the accident. He had never worked in that section of Proviso Yard, and he had not received any training on traversing City Lead Track. As a result, the conductor

did not know precisely where City Lead Track merged with South Melrose Track and failed to alert the engineer to halt the train at the designated stopping point, which ultimately caused the collision. The conductor had minimal experience leading shoving movements after UP certified him, and he was not adequately familiar with the territory on which he was working when the accident occurred. The conductor's inexperience and lack of familiarity with Proviso Yard and the surrounding area left him unprepared to carry out his job requirements safely on his own.

A location-specific job aid likely could have reduced the risk of operating in an unfamiliar environment, but one was not provided to the crew of the striking train. Location-specific job aids are acknowledged safety tools that can help conductors safely navigate unfamiliar territory and are required by federal regulation.[8] This accident, however, may still not have been avoided by simply providing the striking train crew with a location-specific job aid.

The engineer recognized the limitations in the conductor's experience and lack of knowledge of the surrounding area and expressed the need for assistance. Despite the request, the Proviso Yard controller did not comply with the striking train engineer's request. This lack of assistance introduced unnecessary risk, as it left the crew of the striking train to attempt the shoving movement with inadequate knowledge of the environment.

Probable Cause

The National Transportation Safety Board determines that the probable cause of the Union Pacific Railroad train collision was the conductor, who Union Pacific Railroad sent into the field without performance-based verification that he could safely navigate the territory, not alerting the engineer to stop the train before reaching the designated stopping point. Contributing to the accident was Union Pacific Railroad's failure to

[8] (a) *Title 49 Code of Federal Regulations* (*CFR*) 242.301(d) requires that if a conductor lacks territorial qualification on anything other than main track physical characteristics, they shall be assisted by a person who is territorially qualified at the location or an appropriate up-to-date job aid. (b) A *job aid* refers to information about other than main track physical characteristics that supplements the operating instructions of the territory over which the locomotive or train movement will occur. A job aid may consist of training on the territory, maps, charts, or visual aids of the territory, or a person or persons to contact who are qualified on the territory and who can describe the physical characteristics of the territory. At a minimum, a job aid must cover characteristics of a territory including permanent close clearances, location of permanent derails and switches, assigned radio frequencies in use, special instructions required for movement, if any, and railroad-identified unique operating conditions.

provide the required and requested assistance to the inexperienced conductor who was not familiar with the territory. Further contributing to the accident was the striking train crew proceeding with riding the shoving movement after being informed by the yard controller that no additional support would be provided.

Lessons Learned

As a part of the UP response to this accident, they issued a Critical Incident Alert reaffirming safety standards and regulations for job aids and shoving movement procedures, and further stressing the importance of staying vigilant, maintaining situational awareness of the current task, and being aware of present conditions while performing tasks. During this investigation, the NTSB concluded that UP was not providing job aids throughout its system. As part of the response, UP indicated that they corrected the issue systemwide, and that all UP locations now have up-to-date job aids.

This accident demonstrates the importance of ensuring that conductors tasked with more complex maneuvers, such as leading a train during a shoving movement, possess the training, experience, and personnel support needed to safely perform the task. Crews with limited experience operating in unfamiliar territories are exposed to inherent risks; they must be provided with the required and requested support to complete their tasks safely.

accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)).

For more detailed background information on this report, visit the NTSB Case Analysis and Reporting Online (CAROL) website and search for NTSB accident ID RRD24LR013. Recent publications are available in their entirety on the NTSB website. Other information about available publications also may be obtained from the website or by contacting –

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