



# **Washington Metrorail Safety Commission**

## **FINDING THAT REQUIRES METRORAIL TO PROPOSE A CORRECTIVE ACTION PLAN**

### **Track, Structures, and Roadway Worker Protection Audit**

**September 4, 2025**

### **Summary of Issue**

As part of the Track, Structures, and Roadway Worker Protection (RWP) Audit, the WMSC identified certain level IV-qualified roadway workers in charge were improperly qualified and therefore should not have been performing the duties of that critical role. Roadway workers in charge are the highest level of roadway workers and have the greatest responsibility for the safety of individuals conducting work in the rail right of way, which may be in the presence of trains, lethal high voltage third rail power and on-track rail maintenance vehicles. The WMSC first raised this issue to Metrorail on July 10, 2025, and then issued an urgent hazard notice on July 14, 2025. As a result of that notice, Metrorail conducted a comprehensive review of the training records for all 1,246 level IV roadway workers in charge.

As a result of the WMSC's July 14 urgent hazard notice and Metrorail's review of the training records, Metrorail determined that 192 of 1,246 (~15%) level IV-qualified personnel do not meet Metrorail's requirements to be a level IV-qualified roadway worker in charge. The 192 are in two groups: 130 who have only received the initial level IV training and 62 who have received refresher or requalification level IV training. These nonconformances represent a safety deficiency because Metrorail has no other basis for assuring that its roadway workers are qualified to access the roadway. This qualification is the primary mitigation for the hazards of train movement and electrified third rail.

### **Overview of Roadway Worker Protection**

Metrorail's Roadway Worker Protection Program is the primary method of protecting roadway workers, which include employees, contractors, and—in emergencies—first responders who need to be on or around the track right of way and at risk to the hazards of train movement and electrified third rail.

On August 13, 2010, following National Transportation Safety Board (NTSB) investigations into roadway worker fatalities, Metrorail introduced an overhauled Roadway Worker Protection (RWP) Program that included key features of similar programs regulated by the Federal Railroad Administration (FRA).<sup>1</sup> The Federal Railroad Administration promulgated its first roadway worker

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<sup>1</sup> Prior to August 13, 2010, Metrorail had a program called On Track Safety.

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protection requirements in 1996. Metrorail has made adjustments to the RWP program since 2010 as a result of safety events and operational considerations. Since September 1, 2023, Metrorail's RWP rules are contained in the Metrorail Operating Rulebook, the most recent version (General Order 103) took effect July 1, 2025. The program provides a uniform method of establishing on-track protection, including prescribing personal protective equipment, required to mitigate dangers and hazards associated with working on the rail right of way.

According to Federal Transit Administration (FTA) data, roadway worker safety events have caused more transit worker fatalities than any other type of safety event, including 22 workers killed and 120 seriously injured from January 1, 2008 to October 31, 2022. Among the safety events investigations the WMSC Commissioners reviewed between 2024 and August 25, 2025 (date of the occurrence may be sooner), there are 38 improper roadway worker protection safety event investigation reports, 15 implicated the roadway worker in charge, and 13 of those 15 were part of the probable cause.<sup>2</sup> In one of these 15 investigation reports ([W-0335](#)) the roadway worker in charge from that event is part of the list of 192 personnel identified as not meeting Metrorail's requirements to be a level IV-qualified roadway worker in charge. One other event involving a roadway worker in charge from the list of 192 occurred on October 9, 2024 at New Carrollton Yard (D99) in which a Metrorail Department of Safety inspector identified via a compliance check that the roadway worker in charge did not conduct a roadway job safety briefing (Metrorail Investigation #E24808).

Each time an unqualified individual enters the roadway it constitutes a safety risk. For this reason, Metrorail Operating Rulebook section 17.2 requires that all personnel who enter the roadway must have a valid RWP qualification. This is especially safety critical because in their role as roadway workers in charge, level IV roadway workers select, implement, and monitor RWP protections that keep lesser-training workers safe. Although these level I and II roadway workers must remain vigilant and comply with instructions, they do not have the training and qualifications to make and evaluate RWP protection decisions themselves.

Each contractor and Metrorail employee whose responsibilities require them to be on the right of way must be trained and qualified in RWP before entering Metrorail's rail right of way, referred to as the roadway. The appropriate level of training is determined by the individual's duties. Roadway

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<sup>2</sup> See WMSC Investigation Reports: [W-0264](#) ("probable cause for this improper RWP Event was a failure to follow established procedures by the RWIC"), [W-0278](#) (probable cause found that RWIC entered roadway "without protections established"), [W-0280](#) (probable cause found that RWIC entered red hot spot without required foul time protection), [W-0281](#) (probable cause found that "poor communication" between RWIC and crew resulted in their entering roadway without control center permission), [W-0289](#) (probable cause found that RWIC disregarded control center instructions entered roadway without permission), [W-292](#) (probable cause found that "RWIC's inattention to their location and orientation and inexperience" resulted in entering roadway in area where permission was granted for), [W-0298](#) (RWIC took local control of panel without authorization), [W-0315](#) (contributing factor to probable cause was "a misunderstanding of instructions by the AMF when the RWIC was instructed to allow two trains to pass before entering the roadway"), [W-316](#) (probable cause found that "RWIC errantly reported" their location and as result conducted an authorized track inspection), [W-0318](#) (probable cause found "misinterpretation of instructions between the work crew...after receiving instructions from the RWIC to report to the location to set up one end of the work zone"), [W-0320](#) (probable cause found that "the RWIC inadvertently entered the roadway" on the wrong track, [W-0333](#) (investigation interview identified that the RWIC "forgot the train was coming when they entered the roadway"), [W-0335](#) (probable cause found that the RWIC and crew entered an area without foul time protection because they assessed that the risk was low), [W-0345](#) (probable cause found "ineffective communication" between the control center and RWIC), [W-0377](#) (probable cause found that the RWIC failed to verify their physical location).

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workers in charge are qualified to the highest level (level IV) of the program which involves a 5-day training courses culminating in a practical exercise where personnel are required to demonstrate the skills learned in the class and a computer-based test. If personnel pass the exam and practical exercise, they are required to complete three on-the-job training exercises under the mentorship of a currently-qualified roadway worker in charge. The RWP training and qualification records are the sole mechanism for Metrorail to verify that each person has demonstrated the knowledge and practical skills needed to be on the roadway and to exercise supervisory responsibilities on the roadway.

Once a worker attains the level IV roadway worker protection qualification, it “allows [that level IV roadway worker] to work in any capacity on the roadway and provide RWP safety protections to all personnel on the roadway.” (Metrorail Operating Rulebook 17.8.2.1.)

### **Safety Risk Assessment**

Metrorail’s [Agency Safety Plan \(version 5.0\)](#) guides safety risk assessments (hazard ratings) in section 3.1.2. The rating consists of two measures: **likelihood** (a measure of frequency based on how often the risk is expected to occur) and **severity** (a measure of the consequences expected from the risk occurring). Qualitative and quantitative inputs are used to determine both likelihood and severity.

The primary hazards that roadway worker protection aims to mitigate are rail vehicle movement and third rail electric power. In an unmitigated state, both hazards present frequent (A rating) likelihood and catastrophic (1 rating) severity, which results in a 1A inherent risk rating. Metrorail requires that all personnel be roadway worker protection qualified before entering the roadway, which results in a reduced risk rating accounting for the mitigation. That reduced risk rating is only reasonable to the extent the roadway worker protection qualification is durable. This finding indicates that approximately 15% of roadway workers in charge may not have that stated qualification. Even with a roadway worker protection qualification mitigation in place, that mitigation is not perfectly reliable as illustrated by the 15 events cited in footnote 2—each of which captured the potential exposure to either rail vehicle movement or third rail power. Additionally, the two events (W-0335 and E24808) cited above on page two show the importance of ensuring workers are properly qualified.

The risk rating that accompanies the corrective action plan for this finding must account for the fact the stated mitigations are not perfectly reliable. Metrorail has posited mitigations such as good faith challenge, supervision by department management, control center permissions, and compliance checks. However, to address this finding as it relates to the two hazards noted above, mitigations must have a direct relationship to level IV roadway workers in charge, and particularly the 192 identified as not qualified. To Metrorail’s credit, recent discussions have proposed such mitigations: using the General Orders/Tracking Rights System (GOTRS) to target locations and assignments

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### **Roadway Worker Protection Level IV Qualification Finding**

**Finding: Metrorail is not following its own written process to ensure and document that its roadway workers in charge have demonstrated the knowledge and skills required to do their job safely.**

On July 14, 2025, after reviewing some level IV qualification records in person on July 10 and 11, the WMSC e-mailed Metrorail management notification of an urgent hazard identified during the then-ongoing WMSC Audit of Track, Structures, and Roadway Worker Protection.<sup>3</sup> The contents of that urgent hazard notice are included in the details below.

Metrorail acknowledged the WMSC’s July 14 urgent hazard and initiated a review of the level IV practical and on-the-job documentation, starting with a statistically significant sample. Then, via email on July 18, 2025, Metrorail committed to several interim steps, regardless of the outcome of the ongoing review, which included streamlining and digitizing forms and processes and requiring review and signature for every practical assessment and on-the-job training by the Manager of RWP Training.

The WMSC and Metrorail teams met on July 31, 2025, and Metrorail presented its evaluation of the issue, the sampling methodology for its review, the results of the review, and mitigations for the hazard of not knowing if its level IV-qualified roadway workers in charge are, in fact, qualified.

In the July 31, 2025 meeting, Metrorail committed to several actions:

- Re-qualify the 130 level IV-qualified personnel who only received the initial training.
- Review all 1,164 level IV requalification forms from August 1, 2023 to the present (24 months).
- For requalification records with errors, re-train and re-test affected personnel.
- Create attestation forms for quality control so that the RWP Manager can mark a full folder as complete.
- Split the current level IV initial practical exercise form into three forms (one per scenario type) and provide work instructions.
- Train all qualifying staff on the forms/revisions.
- Digitize the level IV practical forms.

The WMSC asked for clarifications during the meeting and received emails with additional feedback and progress updates on August 4, 2025, and August 18, 2025, that clarified information to supplement Metrorail’s July 31, 2025 presentation.

On August 20, 2025, the WMSC held an exit conference with Metrorail for the Track, Structures, and Roadway Worker Protection Audit at which the WMSC detailed this finding as preliminary.

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<sup>3</sup> The [WMSC Compact](#) and [Title 49 Code of Federal Regulations section 674.13](#) both require that the WMSC to audit WMATA’s compliance with its Agency Safety Plan over a three-year timeframe. Additionally, [Title 49 Code of Federal Regulations section 671.25](#) all requires the WMSC to conduct “an annual audit of the RTA’s compliance with its RWP program, including all required RWP program elements, for each RTA that it oversees.”

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Considering that this is an urgent finding, the WMSC is issuing the finding prior to that audit report. As a result, the corrective action plan process ([WMSC Program Standard Rev. 7.1, Section 9.C](#)) will begin earlier and will occur on an accelerated timeline.

### **Requirement:**

Metrorail Operating Rulebook (MOR), dated July 1, 2025, states in section 17.2 (1.) that “All personnel, regardless of rank or title, shall be Roadway Worker Protection (RWP) trained and qualified before entering the WMATA’s roadway.” Section 17.7.1 states that “All employees and all contractors who access the roadway must be trained and qualified in RWP before entering WMATA’s roadway.” This fact is signified by a sticker affixed to each person’s OneBadge, which means successful completion of requirements. (SARE-05-0007, Roadway Worker Protection Training SOP (dated April 18, 2025).) The sticker is shorthand reference that the person has completed the written and practical exam and—for level IV personnel—on the job training, which is ultimately established by the training records.

Metrorail SOP SARE-05-0007, Roadway Worker Protection Training SOP (dated April 15, 2025) states in section 5 that “The Department of Technical Training and Development is responsible for: designing, producing, implementing, executing, and documenting all employee training in support of Metro’s Roadway Worker Protection (RWP) Training Program” and “training all Metro employees and Metro Board members for RWP 1, 2, and 4 levels, except for the Metro Transit Police Department.” This SOP also states in section 5.7 that “The trainers and employees of the Roadway Worker Protection Training team are responsible for adhering to this SOP.”

Metrorail SOP SARE-05-0219, ‘RWP Level IV Initial Training, Roadway Worker-in-Charge, Practical Exercise Evaluation Form’, Rev 0, dated 4/7/2025, states that “Violation of a “Show Stopper” will result in “failure of the Practical Exercise portion.”

Metrorail SOP SARE-05-0007 requires that “A training record will be maintained of each Roadway Worker Protection Training course conducted. As a minimum the record will contain: 6.7.1.1 RWP Folder Checklist.”

### **Nonconformance:**

On July 10, 2025, as part of audit observations, the WMSC audit team visited Carmen Turner Training Facility (CTF) where the physical records of RWP training and qualification are held (there are no electronic or redundant versions of these records). Metrorail relies on these records to know which workers are qualified to enter the roadway and what RWP duties they are qualified to perform. The audit team began reviewing RWP level IV-qualified training records for RWP level IV courses completed in January and February 2025.

The WMSC audit team found nonconformances (detailed below) and these were communicated directly to the Technical Training and Development Manager before WMSC personnel left for the day on July 10. The observed nonconformances were also communicated via email to Metrorail’s Quality Team on Friday, July 11, 2025, along with notification that the audit team would return that day to continue the records review. Upon arrival on July 11, 2025, members of Metrorail’s Quality team

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were already onsite conducting an assessment of the RWP training and qualification files based on feedback given by the WMSC the prior day.

In total, the WMSC reviewed records from three different level IV classes that started on January 27, 2025, February 3, 2025, and February 10, 2025, respectively.

The RWP training records nonconformances that the WMSC observed on July 10 and 11 can be grouped into five categories (numbered for ease of reading, not by priority):

### **Category 1: Manager Override of Course Scores**

Upon review of the February 24, 2025, Level IV Initial Class, two students were listed as failing the practical examination during the course. However, there is a note on the bottom of the grading sheet that states “Manager Override” along with an email from the RWP Training Supervisor dated April 16, 2025, on the reasons for this Manager intervention. Both individuals were granted their level IV qualification as indicated by the photos in the checklist. The WMSC did not find a provision in Metrorail’s Procedure Number: SARE-05-0007 Roadway Worker Protection Training SOP Technical Training and Development, dated April 18, 2025, that allows overriding the RWP Instructor or course grades to pass individuals.

### **Category 2: Incorrect or Missing Test Score Calculations**

The WMSC Observations included examples of blanks on scoring sheets, different scoring methods, and scores not adding up to the correct total in the records for the January 27, 2025 and February 10, 2025, level IV courses.

### **Category 3: Failing Metrorail-Determined “Show Stoppers” But Passing the Course**

Metrorail’s SARE-05-0219, RWP Level IV Initial Training, Roadway Worker-in-Charge, Practical Exercise Evaluation Form (Rev 0, dated 4/7/2025) states that “Violation of a “Show Stopper” will result in failure of the Practical Exercise portion.” One of these “Show Stoppers” is listed as “Poor Radio communications and inability to gain access to the Roadway.” An evaluation form dated January 13, 2025, notes that the student “failed” for several items related to radio communications, which are considered as “Show Stoppers;” however, it appears that the student passed the course.

### **Category 4: On-the-Job Training (OJT) Not Being Performed as Required**

An individual did not complete on-the-job training within Metrorail’s 30 calendar day requirement. In that example, the class ended on January 31, 2025, and the individual’s last on-the-job training was completed on March 21, 2025. The form used included the 30 days circled for emphasis.

For that same individual, each briefing form used to create the record of training was missing information on the safety contact, rules, hazards, personal protective equipment,

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and response plans. All of these forms were reviewed and signed off by the on-the-job training mentor, a superintendent, and the RWP training manager.

### **Category 5: Incomplete RWP Re-Test Forms**

Section 9.3 of Metrorail's Procedure Number: SARE-05-0007 Roadway Worker Protection Training SOP Technical Training and Development, dated April 18, 2025, mentions RWP re-test forms. However, there is no further instruction on the completion of these forms other than requiring supervisor signatures. The forms the WMSC reviewed did not indicate a supervisor's review or signature.

### **Category 6: Other Issues (Incomplete checklists, Overall file organization)**

The RWP Folder Checklists for each class reviewed were either missing or incomplete. SARE-05-0007 requires that "A training record will be maintained of each Roadway Worker Protection Training course conducted. As a minimum the record will contain: 6.7.1.1 RWP Folder Checklist."

The RWP Folder Checklist for the January 27, 2025, Level IV Initial Class had several items not checked which included the Pre-Test and Equipment Checklist.

For the January 7, 2025 class, the final grades of the class are on the Day 2 roster, rather than the Day 5 roster (the last day of the class), which listed no grades. Multiple daily rosters are missing.

The training record files were inconsistently arranged and required manual organization before it was possible to begin to determine whether qualification requirements were met. The WMSC experienced this firsthand on July 10 and 11. And as a result of this state, it took several Metrorail personnel 44 days to manually review 1,164 level IV re-qualification training records—from the initial urgent hazard notification on July 14, 2025 to reporting the final results to the WMSC on August 27, 2025.

### **Minimum Corrective Action:**

Metrorail must fully document its review of roadway worker protection training records for all those who are currently identified as level IV-qualified and the subset of personnel that do not meet the requirements for that qualification. Metrorail must re-test and re-qualify all personnel who have been identified as not meeting the qualification requirements or whose qualification cannot be verified. Metrorail must ensure that the personnel involved in training are properly trained and conduct the training and qualification in accordance with Metrorail's requirements. Metrorail must evaluate its current record keeping system and revise its processes and procedures to ensure the records are consistently organized and regularly checked for sufficiency and completeness. In the interim, while affected level IV-qualified roadway workers in charge are being re-tested and re-qualified, Metrorail must institute interim mitigations such as removing all affected workers from level IV duties or if affected workers are not removed from level IV duties: instituting significant direct oversight and monitoring activities while affected workers are performing their tasks.

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### **Next Steps**

Because this is an urgent hazard, Metrorail is required to propose a corrective action plan to address this finding **no later than 7 days (September 11, 2025)** after the issuance of this report. ([Program Standard Rev. 7.1, Section 9.C.3.b.](#)) The proposed corrective action plan must include several elements, including but not limited to, specific and achievable planned actions to remediate the deficiency, the person responsible for implementation, and the estimated date of completion. (Section 9.C.2.)

The WMSC will provide a response to that proposal within 7 days, approving the CAP proposal for implementation or providing feedback that notes the proposal's deficiencies. After receiving the WMSC's response, WMATA has 7 days to address the WMSC's feedback. The WMSC will provide a response within 7 days of WMATA's revised submission. If further revisions are needed, this cycle continues until CAP approval.