



U.S. Department
of Transportation

**Federal Transit
Administration**

Headquarters

1200 New Jersey Avenue, SE
Washington, DC 20590

APR 24 2017

Mr. Paul Wiedefeld
General Manager and Chief Executive Officer
Washington Metropolitan Area Transit Authority
600 Fifth Street, NW
Washington, DC 20001

Subject: Immediate Actions to Address Protection of Workers on the Roadway

Dear Mr. Wiedefeld:

As you know, the Federal Transit Administration (FTA) has temporary, direct responsibility for overseeing the safe operation of the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system, not only for riders but also for transit workers. The FTA Safety Management Inspection of June 2015 and subsequent FTA inspections and investigations have identified several areas of critical concern regarding compliance with roadway worker protection (RWP) procedures on the Metrorail system. Several of those concerns were raised in my April 18, 2016, letter to you and in numerous discussions between my staff and yours. National Transportation Safety Board accident investigations and Tri-State Oversight Committee (TOC) reviews have raised similar concerns. While WMATA has a comprehensive RWP program and has made progress on corrective actions required by FTA, recent incidents on Metrorail are evidence that WMATA has not consistently followed its own RWP requirements and that unsafe practices exist that present substantial risk of death or personal injury to roadway workers.

Specifically, the June 2015 Safety Management Inspection report identified numerous deficiencies in RWP at WMATA relating to the rail operations control center (ROCC) and radio communications coverage and protocols. These concerns were addressed in required actions under the Corrective Action Plan mandated by FTA Safety Directive 15-1. RWP-related deficiencies were again addressed in December 2015, when FTA issued Safety Directive 16-2, which imposed additional required actions to address open safety findings issued by the TOC prior to FTA's assumption of direct safety oversight of WMATA.

In summary, Safety Directives 15-1 and 16-2 required 32 actions related to WMATA's RWP program, including those pertaining to the ROCC and radio communications, which are, of course, critical components of an effective RWP program. As of April 21, 2017, 19 of these required actions were open and past due, 3 were open but not yet due, and 10 were under FTA review or have been closed. While WMATA has implemented 100 percent repeat-back radio protocols in response to these requirements, WMATA has yet to address requirements to properly scope and staff its rail control function and to provide territory familiarization training to and establish procedural checklists, testing, and performance standards for its rail controllers.

In its April 18, 2016, letter, FTA instructed WMATA to immediately conduct safety briefings to ensure that WMATA management, supervisors, roadway workers, train operators, and rail controllers understood all applicable WMATA rules and requirements designed to protect maintenance employees on the roadway. These safety briefings reviewed specific communications that must take place with the ROCC and among the work crew before any crew enters active track, clarified requirements for WMATA employees to request a halt to train operations through the use Foul Time when moving through "no clearance" areas, and reviewed requirements and procedures for redundant signal protection using shunts.

Notwithstanding these measures, several serious RWP-related incidents have occurred on Metrorail in 2017. There have been at least four instances in which violations of WMATA's RWP procedures have led to unauthorized workers on the roadway and trains entering protected work zones at track speed. Obviously, these events are of particular concern because they demonstrate significant failures of mechanisms designed to protect workers from unauthorized train movements into their established work zones when using Foul Time and Inaccessible Track protections. While other RWP levels of protection rely primarily on the roadway worker to place barriers on the roadway or otherwise ensure sufficient advance notice to get to a place of safety, Foul Time relies on the rail controller to utilize the signal system and communicate with rail operators in order to hold trains outside of the established work zone for a limited period of time.

Given these recent, very serious incidents, and WMATA's delay in implementing the required actions in Safety Directives 15-1 and 16-2, I find that unsafe conditions and practices exist that present a substantial risk of death or personal injury to roadway workers at WMATA. This finding compels me to require WMATA to take immediate actions related to the use of Foul Time.

In accordance with federal public transportation safety law, WMATA shall submit work plans to FTA that:

1. Require the use of at least one redundant protection method implemented by field personnel to hold trains outside of a work zone when utilizing Foul Time protection.¹
2. Clarify the conditions or roadway areas in which Individual Train Detection (ITD) and Train Approach Warning are insufficient levels of protections and a higher level of protection, such as Foul Time, must be utilized.
3. Clarify rail controller-rail operator-roadway worker communications to implement, document, and release Foul Time consist with WMATA's permanent order requiring a 100 percent repeat back radio protocol.²

¹ Possible examples of this include the use of 1) a shunting device, 2) a flagger holding trains outside of the work area, or 3) a roadway worker's broadcast acknowledgement and acceptance of the first held rail operator's radio announcement confirming that he or she is holding at a specific, named signal until the rail controller directs him or her to proceed and the rail controller's confirmation announcement noting each of the specific signal protections that are in place and his or her authorization for Foul Time.

² Possible examples of this include 1) specific dialogue or communications protocols among the rail controller, rail operator, and roadway workers or 2) implementing rail controller documentation that both rail controllers affirm.

4. Reduce rail controller distractions, workload, and potential for miscommunication when handling Foul Time requests.³
5. Determine compliance with Foul Time requirements.⁴
6. Require a Safety Stand Down to brief rail control personnel, personnel who work on the roadway, and train operators of the changes resulting from items one through five above.

Not later than five business days from the date of this letter, please submit to the Director of FTA's WMATA Safety Oversight Office, Angela Dluger (angela.dluger@dot.gov), a work plan that sets forth actions that WMATA already has taken or will take to correct RWP procedures as well as a plan to address the serious staffing shortages in both the rail and maintenance operations centers. FTA will review and approve WMATA's work plans and will monitor the agency's progress in resolving each required action.

Be advised that if you fail to comply with the required actions stated herein, FTA has the authority to withhold up to 25 percent of WMATA's section 5307 Urbanized Area Formula funds until the requirements have been met, in accordance with federal public transportation safety law.

In summary, while we recognize WMATA's progress on rail controller training and radio communications protocols, roadway worker incidents continue to occur. FTA is concerned that procedures are not being followed, protocols for Foul Time application are ineffective, staffing limitations in the ROCC continue, and distractions in the ROCC impede safe operations. Your commitment to take all necessary steps needed to immediately address these safety concerns is expected.

Please do not hesitate to contact Ms. Dluger or me with any questions or concerns.

Sincerely,



Thomas Littleton, PhD
Associate Administrator
Office of Transit Safety and Oversight

cc: Joseph Leader, Chief Operating Officer, WMATA
Andrew Off, Assistant General Manager for Rail Services, WMATA
Patrick Lavin, Chief Safety Officer, WMATA
Angel Peña, Managing Director, Quality Assurance, Internal Compliance & Oversight,
WMATA
Sharmila Samarasinghe, Chair, Tri-State Oversight Committee

³ Possible examples of this include 1) requiring rail controllers to monitor the locations of trains in the vicinity and document that they do not proceed past the holding point, 2) prohibiting rail controllers from performing non-essential tasks, 3) prohibiting rail controllers from transitioning their duties to another rail controller when managing Foul Time unless an urgent need exists, or 4) requiring any relieving rail controller during Foul Time to affirm in writing the active use of Foul Time and note the circumstances requiring the transition.

⁴ Possible examples of this include 1) electronically documenting these events or 2) performing compliance audits.