

**Safety Directive 16-3**  
***Required Actions to Address Persistent Critical Safety Findings to the Washington  
Metropolitan Area Transit Authority***

**UNITED STATES DEPARTMENT OF TRANSPORTATION**

**Federal Transit Administration**

**[Safety Directive No. 16-3, Notice No. 1]**

**Safety Directive Under 49 U.S.C. 5329**  
**Required Actions to Address Persistent Critical Open Safety Findings Issued to the  
Washington Metropolitan Area Transit Authority**

**AGENCY:** Federal Transit Administration (FTA), U.S. Department of Transportation (DOT).

**SUMMARY:** FTA Safety Directive 16-3 requires the Washington Metropolitan Area Transit Authority (WMATA) to take urgent action to address persistent safety findings with personnel response to safety risks. The Directive establishes new required actions to elevate emergency planning, exercises, testing and readiness to a high priority level of attention within the WMATA system. Additionally, WMATA must conduct an immediate safety stand down to focus resources and staff on safety. Decision-making must be focused on the basis of safety and not operational convenience. In addition, WMATA must take actions to reduce fire and smoke risks, these actions must include mitigations such as reduction in number of railcars on trains, speed reductions and other methods to lessen the power load in known high risk areas.

**FOR FURTHER INFORMATION CONTACT:** For program matters, Sean Thompson, Special Assistant and Director, WMATA Safety Oversight, Office of Transit Oversight and Safety, telephone (202) 366-3616 or [Sean.Thompson@dot.gov](mailto:Sean.Thompson@dot.gov); For legal matters, Scott Biehl, Senior Counsel, FTA, telephone (202) 366-0826 or [Scott.Biehl@dot.gov](mailto:Scott.Biehl@dot.gov).

**SUPPLEMENTARY INFORMATION:**

**Background**

The FTA Safety Directive 16-3 requires WMATA to take immediate action to reduce the risk of smoke and fire events, to enhance the exercise of its emergency preparedness program, to conduct an organization-wide rail safety stand-down to focus all departments on core safety protocols and procedures, and make decisions based on safety rather than on operational demands.

Safety is DOT's first priority, and at FTA, the safety of public transportation passengers and workers is our highest priority. Serious safety events and incidents on the WMATA Metrorail system continue to occur with great frequency, including multiple smoke and fire events, red signal overruns, and derailments. Just since April 23, 2016, there have been eight smoke and fire events requiring evacuation and suspension of service.

While these events are occurring more frequently, WMATA continues to experience organizational and operational deficiencies that significantly limit its ability to recognize and

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resolve even the most serious safety issues. The WMATA staff's adherence to safety protocols has lapsed to such an extent that its employees are not adhering to critical safety policies and procedures, and thereby are placing its own passengers and other employees at undue risk. Furthermore, WMATA personnel are not effectively balancing safety-critical operations and maintenance activities with the demand for passenger service.

These are issues that previously were identified by FTA in Safety Directive 15-1 (June 17, 2015). On April 18, 2016, FTA sent a letter to WMATA requiring immediate action to address serious deficiencies regarding fire and life safety issues and roadway worker protection issues identified during FTA's recent safety blitz of WMATA.

On May 5, 2016, there was another fire and life safety event. Our preliminary information indicates this was an early morning third rail insulator explosion at the Federal Center Southwest Station, which significantly damaged track and sprayed fiery metal and ceramic projectiles onto the station platform. Video of the incident depicted the intensity of this explosion. Preliminary information indicates that WMATA personnel responses to this event were slow and inadequate. First, WMATA failed to notify FTA of the event in accordance with established protocol. Second, after the explosion an operations supervisor at the scene conducted only a cursory inspection before ordering the damaged track back into service. Third, when WMATA maintenance personnel arrived on the scene shortly after the event and requested permission from the Rail Operations Control Center (ROCC) to have the track taken out of service and power removed from the third rail so that appropriate inspections could be performed, the ROCC denied that permission. The ROCC did not give WMATA investigators clearance to proceed with the inspections until several hours later. During this time revenue trains continued to operate across this potentially dangerous track without interruption. In fact, a second fire and smoke incident to which the Fire Department responded occurred at this same station later in the day. Only then did WMATA close this portion of the Blue, Orange and Silver Lines from L'Enfant Plaza to Eastern Market to conduct needed repairs.

These multiple failures demonstrate significant safety lapses by the ROCC, which controls access to the tracks, manages abnormal and emergency events, and ensures the safety of trains and personnel on the right-of-way. WMATA must take immediate action, as detailed below, to train personnel in emergency preparedness and response, and prioritize safety over revenue operations.

In our Safety Directive 15-1, dated June 17, 2015, FTA determined that WMATA work crews do not have sufficient access to the rail right-of-way to perform critical inspection, testing and maintenance activities. This is still the case. Increased demands for passenger service have shrunk available maintenance windows during the evenings, weekends, and late nights. As a direct consequence, WMATA's maintenance departments collectively have accumulated thousands of backlogged work orders dating back to 2012 and 2013. Lack of track access has left WMATA's maintenance managers struggling to prioritize the most significant and safety critical repairs for completion, while deferring and re-scheduling other work.

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Taken together, these issues raise significant concerns about the overall safety of the system. For the reasons stated above, immediate action is required.

**Required Safety Directive Immediate Actions:**

In accordance with 49 U.S.C. § 5329 and the authority delegated to the Federal Transit Administrator by the Secretary of Transportation, 49 CFR 1.91, the FTA directs WMATA to take the actions set forth below.

**Immediate Action 1:** Prioritize safety before operational convenience

- Supervision at all levels of MetroRail operations must ensure that decision-making is made on the basis of safety and not operational convenience. All employees will receive training on the primacy of safety in MetroRail operations as part of the safety stand-down directed in Immediate Action 4. This training must be completed by May 16, 2016.

**Immediate Action 2:** Mitigate fire and smoke risk

- Conduct immediate and ongoing daily use of railcar infrared testing during peak load times to identify traction power “hot spots” on the third-rail system and then initiate immediate repairs at these locations.
- In high risk areas, implement immediate mitigations to reduce amperage draw. Examples of appropriate mitigations include but are not limited to reduction of train lengths; turning-off regenerative braking to reduce power being introduced into the system; and reducing acceleration speed to draw less current (work with car manufacturer to limit acceleration speed/current draw).
- Immediately identify areas of significant water intrusion in tunnels and conduct additional ongoing daily inspections in these areas to monitor the condition of traction power infrastructure until water remediation work is completed.

**Immediate Action 3:** Improve emergency planning and preparedness

- Immediately institute Emergency Planning, Exercises, Testing and Readiness programs for adequacy for all critical WMATA offices.
- Conduct training drills with staff to ensure they understand how to rapidly and effectively respond to emergencies and passenger evacuation. Include participation of the ROCC in these training drills. Also verify that ROCC personnel understand the guidelines and diagrams developed for tunnel fans, under platform fans and dome fans, and that the new fire/life safety inspection and maintenance procedures address emergency response testing by May 16, 2016.



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**Immediate Action 4:** Conduct a safety stand-down

- Conduct a safety stand-down to ensure that management, supervisors, roadway workers and controllers understand all applicable WMATA and FTA requirements for safe operations. At a minimum, WMATA must accomplish the following during the safety stand down:
  - Conduct an After Action Review of the Federal Center SW Station arc flash incidents on May 5, 2016.
  - Review with all operating personnel, supervisors and management all procedures related to managing fire and smoke emergencies, inspecting and maintaining infrastructure critical to smoke and fire prevention, and managing passenger evacuations.
  - All MetroRail supervisors and employees that inspect track and place it back into service are to review all policies and procedures.


Effective immediately, WMATA must comply with FTA's Safety Directive. Thereafter, FTA will review and approve WMATA's work plans, and will monitor the agency's progress in complying with each required action.

WMATA must provide a designated lead for each Action identified in this Safety Directive, and this designated lead must be available to FTA to coordinate oversight activities.

**Enforcement**

Any violation of this directive or the terms of any written plan adopted pursuant to this directive will be managed in accordance with FTA's authorities under 49 U.S.C. § 5329, including but not limited to withholding up to 25 percent of financial assistance to WMATA under 49 U.S.C. § 5307, and issuing restrictions, closures or prohibitions on service as necessary and appropriate to address unsafe conditions or practices that present a substantial risk of death or personal injury.

**Issued on: May 7, 2016**

  
**Carolyn Flowers**

Acting Administrator  
Federal Transit Administration  
U.S. Department of Transportation