



Washington Metropolitan Area Transit Authority (WMATA)

Safety Directive 16-5 - Stop Signal Overrun Investigation Tracker

All CAPs in this Directive were **closed** as of 07/17/20

Corrective Action Plan (CAP) Summary			
Total	Submitted (✓)		Open (●)
	Closed	Under Review <sup>1</sup>	
11	11	0	0

<sup>1</sup> Under Review status includes items that were submitted to FTA for review and closure, and items that were returned by FTA to address additional comments.

Risk Assessment Category and Description with CAP Totals			
I	II	III	IV
Unacceptable	Undesirable - ESC* Decision Required	Acceptable with ESC* Review	Acceptable without ESC* Review
Submitted: 0   Open: 0	Submitted: 10   Open: 0	Submitted: 1   Open: 0	Submitted: 0   Open: 0

\* ESC - Executive Safety Committee

CAP Number	Risk Assessment	Closure Submission Date**	CAP Status	Actionable Item Status
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\*\*Date WMATA requests closure. Actual closure date is subject to FTA review and acceptance of the closure.

Stop Signal Overrun Investigation	<div><div></div><div>0%50%100%</div></div>	100%
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FTA-RED-16-001-A	II	December 2018	Closed	<div><div></div><div>0%50%100%</div></div>	100%
<p>To support train and equipment operator identification of signals, WMATA must improve the visibility of signal markers.</p> <ul style="list-style-type: none"><li>✓ WMATA performed system-wide inspection of signal nameplates.</li><li>✓ WMATA developed system-wide cleaning and Rehabilitation Schedules and provide quarterly updates</li><li>✓ WMATA developed and implement a Cleaning and Inspection Program</li><li>✓ Finally, WMATA performed a quality assurance audit to review actionable items.</li></ul>					
FTA-RED-16-001-B	II	October 2018	Closed	<div><div></div><div>0%50%100%</div></div>	100%
<p>Install line identification and direction signage at tunnel entrances and inside tunnels.</p> <ul style="list-style-type: none"><li>✓ WMATA determined appropriate signage locations.</li><li>✓ WMATA surveyed tunnels to map proposed locations.</li><li>✓ WMATA developed proposed improvements and a tentative implementation plan for jurisdictional review.</li><li>✓ WMATA developed and implement a final implementation plan when improvements are accepted by jurisdictional fire chiefs.</li><li>✓ Finally, WMATA performed a quality assurance audit to review actionable items.</li></ul>					
FTA-RED-16-001-C	II	July 2017	Closed	<div><div></div><div>0%50%100%</div></div>	100%
<p>To enhance train and equipment operator familiarity with the Metrorail system, WMATA must increase opportunities for visual observation of the system as part of its program to address FTA-RED-15-004.</p> <ul style="list-style-type: none"><li>✓ WMATA generated printed maps and modify pre-operational checklists.</li><li>✓ WMATA expanded efforts under FTA-RED-15-004 to enhance operating characteristic training curriculum.</li><li>✓ Finally, WMATA performed a quality assurance audit of actionable items.</li></ul>					
FTA-RED-16-002-A	II	September 2017	Closed	<div><div></div><div>0%50%100%</div></div>	100%
<p>WMATA must increase rules checks, including random testing for conformance with stop signals and must incorporate these additional checks and random testing program into the agency's response to FTA-RED-15-001.</p> <ul style="list-style-type: none"><li>✓ WMATA expanded efforts under TOC-RED-15-001, TOC-RED-15-006, and FTA-RED-16-001-C to incorporate random conformance testing for stop signals.</li><li>✓ Finally, WMATA performed a quality assurance audit of actionable items.</li></ul>					
FTA-RED-16-002-B	II	August 2017	Closed	<div><div></div><div>0%50%100%</div></div>	100%
<p>WMATA must formalize its program for conducting a dedicated review of signal system downloads to monitor train operator performance and must incorporate this program into the agency's response to FTA-RED-15-001.</p> <ul style="list-style-type: none"><li>✓ WMATA developed and implement a formal train speed monitoring program.</li><li>✓ WMATA provided progress updates for the monitoring program.</li><li>✓ Finally, WMATA performed a quality assurance audit of actionable items.</li></ul>					

CAP Number	Risk Assessment	Closure Submission Date**	CAP Status	Actionable Item Status
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\*\*Date WMATA requests closure. Actual closure date is subject to FTA review and acceptance of the closure.

FTA-RED-16-003-A	II	May 2017	Closed		100%
WMATA must review its Fatigue Risk Management System (FRMS) to ensure that this program provides train operators with sufficient information and training, including topics such as personal readiness and the use of the point-of-power stickers installed on the consoles of the operating cabs. <ul style="list-style-type: none"><li>√ WMATA reviewed and updated the FRMS.</li><li>√ WMATA developed a fatigue/wellness training course.</li><li>√ WMATA reviewed the effectiveness of the FRMS training course.</li><li>√ Finally, WMATA performed a quality assurance audit of actionable items.</li></ul>					
FTA-RED-16-003-B	II	July 2021	Closed		100%
WMATA must perform a hazard analysis regarding the positive stop options currently under review to prevent trains from operating with zero speed commands without authorization from the ROCC. <ul style="list-style-type: none"><li>√ WMATA selected a positive stop option for implementation.</li><li>√ WMATA solicited price proposals from industry vendors and issued contracts for the scope of work.</li><li>√ WMATA designed and performed a hazard analysis of the selected option.</li><li>√ WMATA validated and implemented the positive stop option selected.</li><li>√ WMATA confirmed there was reasonable evidence to support completion of actionable items and performance measures.</li></ul>					
FTA-RED-16-003-C	II	September 2017	Closed		100%
Once the modification at the Grosvenor-Strathmore Station Center Pocket Track is fully implemented, WMATA must establish a program to monitor its performance. <ul style="list-style-type: none"><li>√ WMATA selected a positive stop option for implementation.</li><li>√ WMATA solicited industry review of selected option and scope of work.</li><li>√ WMATA piloted the selected option and evaluate results.</li><li>√ WMATA performed a hazard analysis of the selected option.</li><li>√ WMATA implemented the positive stop option selected.</li><li>√ Finally, WMATA performed a quality assurance audit of actionable items.</li></ul>					
FTA-RED-16-004-A	II	June 2021	Closed		100%
WMATA must develop and implement a procedure for auditing radio protocol, radio communications, and for ensuring conformance with Permanent Order T-16- 10 Radio Protocols. <ul style="list-style-type: none"><li>√ WMATA developed a radio protocol audit procedure.</li><li>√ WMATA performed quarterly radio protocol audits.</li><li>√ WMATA confirmed there was reasonable evidence to support completion of actionable items and performance measures.</li></ul>					
FTA-RED-16-005-A	II	March 2019	Closed		100%
WMATA must provide FTA with a quarterly report documenting its assessments and findings regarding radio quality, and planned corrective actions. <ul style="list-style-type: none"><li>√ WMATA developed procedures for monitoring radio coverage and performance.□</li><li>√ WMATA performed field surveys of radio coverage, identifying areas for improvement and developing corrective actions.</li><li>√ WMATA tracked radio communication issues and corrective actions.</li><li>√ Finally, WMATA performed a quality assurance audit of actionable items.</li></ul>					
FTA-RED-16-006-A	III	July 2017	Closed		100%
WMATA’s Department of Safety and Environmental Management must create, either as a standalone document or as part of its own accident investigation procedure, an enhanced stop signal overrun investigation process with standardized data fields for trending and analysis. <ul style="list-style-type: none"><li>√ WMATA developed a formal stop signal overrun investigation process as a supplement to the incident/accident investigation policy.</li><li>√ Finally, WMATA performed a quality assurance audit of actionable items.</li></ul>					