



WMSC Inspection Report 20260923

ISSUED 9/24/2026

Inspection Details

Title: Track Maintenance Defect Reporting Progression

Location: Metrorail MaxTrax and Optram Databases

Date of Inspection: 9/17/2026 to 9/21/2026

Time of Inspection: September 17, 2026, through September 21, 2026 (eight hours)

Unannounced

Non-Risk-Based

Functional Area: Track

Hazard Rating: 2B

Overview

From September 17–21 of 2026, a WMSC Inspector conducted an eight-hour examination of track maintenance defects as reported in Metrorail’s Maxtrax and Optram databases. MaxTrax and Optram are specialized enterprise software solutions used by Metrorail to manage their track and structures assets. WMATA’s track inspection and safety standards are defined by the Track and Structures (TRST) TRST-1000.

This inspection reviewed all track conditions presently categorized by Metrorail as “red” level (165 total), which are conditions that trigger a “slow” (15mph) speed restriction. The purpose of the inspection was to verify Metrorail’s adherence to TRST-1000 standards by examining the listed conditions and category level “red” then comparing that color-coded rating with TRST-1000 requirements for each stated condition.

The inspection identified four records (out of 165), approximately 2%, where the priority level documented as “red” should instead be the more severe rating of “black” based on the currently stated conditions outlined in the databases’ defect descriptions. Accurate condition ratings based on the stated descriptions (supplied by weekly track inspections) are important because this informs what work Metrorail prioritizes for maintenance. “Black” conditions are segments that in accordance with the TRST-1000 must be taken out of service until mitigated. Therefore, these conditions are ones that, from a safety perspective, Metrorail must prioritize above all others.



After concluding the inspection, the WMSC Inspector conducted a debrief with the Senior Director of TRST in accordance with Program Standard Section 6.F.1.

Defects and Corrective Actions

WMSC Inspections identify safety issues that may be classified as defects, findings, or recommendations. Findings and recommendations are defined by Program Standard Section 5.E.2 and 5.E.3, respectively. Ordinarily, issues identified in a WMSC inspection report are classified as defects. Defects are specific safety issues of non-conformance/non-compliance that are identified, and that require remedial action.

This inspection did not identify any findings or recommendations and therefore does not require a WMSC Corrective Action Plan in accordance with Program Standard Section 5.E.4.

Observations and Defect Determinations

The TRST-1000 rates various track defects by severity using a color-coded system (green, yellow, red, or black conditions):

- “green/minimal wear” condition indicates a condition of serviceability exists when the track structure is maintained well within the limits of track tolerances.
- “yellow” condition indicates damage or wear.
- “red” condition indicates severe damage or a condition that exceeds tolerances.
- “black” condition is the most severe on this condition rating scale and indicates a failing or failed track defect condition.

The WMSC identified four defects out of a review of 165 records (approximately 2%) within Maxtrax that are currently assigned a red priority classification but should instead be classified as a black priority level based on Metrorail’s Track Inspection and Safety Standards (TRST-1000).



Defect 1

Optram ID	Location	MaxTrax Defect Description	Assigned Priority	Expected Priority based on TRST-1000 Ratings Table
536958445	J2 627+30 to 627+70	15 total ties deteriorated, 22 loose screw spikes, gauge is between 56 13/16 To 56 7/8..12 8 feet ties, 3 10 feet ties	Red	Black: There are 17 ties in a 40 ft section; therefore, there are only 2 non-defective ties distributed throughout the section defining this as a level black. See TRST -1000 Table 107.3A

Table 1: States 15 deteriorated ties in a 40 ft. Section. There are 17 ties in a 40 ft section; therefore, there are only 2 non-defective ties distributed throughout the section defining this as a level black. See TRST –1000 Table 107.3A

Table 107.3A: Defective Tie Guidelines: Minimum Non-Defective in 40 ft.

Tangent to 2500 ft. Radius	2500 ft. to 800 ft. Radius	<800 ft. Radius	Max Distance between Non-Defective Ties	Level	Operating Speed
12	13	14	Up to 60 inches	Green	Normal
10	11	12	More than 60 up to 90 inches	Yellow	Medium
7	8	9	More than 90 up to 120 inches	Red	Slow
Less than 7	Less than 8	Less than 9	More than 120 inches	Black	OOS

Table 2: TRST-1000 Table 107.3A list Defective Tie Guidelines: Minimum Non-Defective in 40 ft.

Hazard Rating: 2B

**Defect 2**

Optram ID	Location	Defect Description in Maxtrax	Assigned Priority	Expected Priority based on TRST-1000 Ratings Table
535623694	B1 139+50	7 consecutive clip housing assemblies broken/ 4 cracked frog plates/ 1/4 pumping of frog B99 27A no lateral movement	Red	Black: As per the TRST-1000, Table 108.6A, more than 4 consecutive missing clips is a level black.

Table 3: States 7 consecutive clip housing assemblies broken. As per the TRST-1000, Table 108.6A, more than 4 consecutive missing clips is a level black.

Table 108.6A: Frog Plate Hold-Down

Level	Operating Speed	Missing e-clip % of Total	Consecutive Missing Clips	Missing Plate Anchorage % of Total	Consecutive Missing Spikes (Ballasted)	Consecutive Missing Studs (DF)
Green	Normal	0-25	2	0-25	4	2
Yellow	Medium	26-36	3	26-36	6	3
Red	Slow	37-50	4	37-50	8	4
Black	OOS	More than 50	More than 4	More than 50	More than 8	More than 4

Table 4: TRST-1000 Table 108.6A lists ratings for Frog Plat Hold-Down.

Hazard Rating: 2B

**Defect 3**

Optram ID	Location	Defect Description in Maxtrax	Priority Assigned at Reporting	Expected Priority based on TRST-1000 Ratings Table
538053677	D2 128+60 to 128+90	Eleven consecutive sw31 fasteners split and deteriorated with worn serrations on the low rail of the curve.	Red	Black: This area is within a curve with a radius of 955.75', therefore according to the TRST-1000, Table 107.5A, there are less than 8 non-defective fasteners in a 40 ft section, making it a level black. There is a total of 17 fasteners in a 40 ft section.

Table 5: States 11 consecutive split and deteriorated fasteners in a 30 ft section. This area is within a curve with a radius of 955.75', therefore according to the TRST-1000, Table 107.5A, there are less than 8 non-defective fasteners in a 40 ft section, making it a level black. There is a total of 17 fasteners in a 40 ft section.

Table 107.5A: Direct Fixation/Restraining Rail Fastener Guidelines: Minimum Non-Defective in 40 ft.

Tangent to 2500 ft Radius	2500 ft. to 800 ft. Radius	<800 ft. Radius	Max Distance between Non-Defective Fasteners	Level	Operating Speed
12	13	14	Up to 60 inches	Green	Normal
10	11	12	More than 60 up to 90 inches	Yellow	Medium
7	8	9	More than 90 up to 120 inches	Red	Slow
Less than 7	Less than 8	Less than 9	More than 120 inches	Black	OOS

Table 6: TRST-1000 Table 107.5A lists Direct Fixation/Restraining Rail Fastener Guidelines: Minimum Non-Defective in 40ft.

Hazard Rating: 3C

**Defect 4**

Optram ID	Location	Defect Description in Maxtrax	Priority Assigned at Reporting	Expected Priority based on TRST-1000 Ratings Table
537806222	L2 144+10 to 144+30	Nine consecutive f20 fasteners on the turnout closure rail of D06 3A switch are deteriorated with worn serrations not allowing lock washers to properly lock in place securely.	Red	Black: As per the TRST-1000, Table 107.5A, the max distance between non-defective fasteners that is more than 120 inches (10') is considered a level black. This area consists of 240 inches (20') of defective fasteners.

Table 7: States 9 consecutive fasteners are deteriorated on a 20 ft closure rail. As per the TRST-1000, Table 107.5A, the max distance between non-defective fasteners that is more than 120 inches (10') is considered a level black. This area consists of 240 inches (20') of defective fasteners.

Table 107.5A: Direct Fixation/Restraining Rail Fastener Guidelines: Minimum Non-Defective in 40 ft.

Tangent to 2500 ft Radius	2500 ft. to 800 ft. Radius	<800 ft. Radius	Max Distance between Non-Defective Fasteners	Level	Operating Speed
12	13	14	Up to 60 inches	Green	Normal
10	11	12	More than 60 up to 90 inches	Yellow	Medium
7	8	9	More than 90 up to 120 inches	Red	Slow
Less than 7	Less than 8	Less than 9	More than 120 inches	Black	OOS

Table 8: TRST-1000 Table 107.5A lists Direct Fixation/Restraining Rail Fastener Guidelines: Minimum Non-Defective in 40 ft.

Hazard Rating: 3C



Next Steps

Please respond **by Monday, September 28, 2026**, to acknowledge receipt and to convey responses to the WMSC regarding what, if any, actions will be or have been taken in response.