



WMSC Inspection Report 20250516

ISSUED 5/19/2025

Inspection Details

Title: Ample Time and Watchman/Lookout sight distance using Train Approach Warning (TAW)

Location: Red line and Green line

Date of Inspection: 5/16/2025

Time of Inspection: 7am to 11:00am

Unannounced

Non-Risk-Based (Ample Time, Need vs. Speed chart)

Functional Area: Roadway Worker Protection

Hazard Rating: 1D

Overview

On Friday, May 16, 2025, a WMSC Inspection team performed a non-risk-based inspection on the Red and Green lines. The purpose of the inspection was to verify Ample Time sight distance used by the Watchman/Lookout during mobile work crew inspections. According to Metrorail Operating Rulebook (MOR) rule 17.8.4.(a.), Ample Time requires workers to be in a position of safety not less than 15 seconds before a train or rail equipment moving at the maximum speed authorized on that track can pass the location of the Roadway Worker; or there are sufficient levels of protection that permit workers time to clear the tracks without urgent movement. The WMSC conducted an independent review of Metrorail's Ample Time protection and the use of the need vs. speed chart in the MOR for protecting mobile workers. The WMSC Inspectors were particularly focused on potential safety hazards of a station overrun. A station overrun occurs when a Class 1 revenue vehicle, making a scheduled station stop, fails to stop within the station platform limits, and is unable to service the platform under normal door operations. Adherence to the established rules for Ample Time and the use of the need vs speed chart is important to ensure the life safety of WMATA work crews.



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.

Defect Observations and Determinations

The inspection was conducted via observations of rail vehicles entering and exiting stations from the platform. The WMSC Inspectors used the December 15, 2024, Metrorail Quick Access Guide (QAG) to determine the maximum authorized speed of rail vehicles entering stations. The observations were conducted from station platforms that are approximately 600 feet in length. All chain markers within the Metrorail rail system are separated by 100 feet. The WMSC Inspectors visually confirmed that the additional number of chain markers required to achieve ample time could be observed in both directions from the eight-car marker on the platform.

Maximum Speed (MPH)	Feet Per Second	Required Sight Distances			
		Minimum Required Sight Distance (Feet)	If it Takes 5 Seconds to Reach PPOS (Feet)	If it Takes 10 Seconds to Reach PPOS (Feet)	If it Takes 15 Seconds to Reach PPOS (Feet)
5	7.3	110	147	183	220
10	14.6	220	293	337	440
15	22	330	440	550	660
20	29.3	440	587	733	880
25	36.6	550	733	917	1100
30	44	660	880	1100	1320
35	51.3	770	1027	1283	1540
40	58.6	880	1173	1467	1760
45	66	990	1320	1650	1980
50	73.3	1100	1467	1833	2200
55	80.6	1210	1613	2017	2420
60	88	1320	1760	2200	2640
65	95.3	1430	1907	2383	2860
70	102.6	1540	2053	2567	3080
75	110	1650	2200	2750	3300

Fig 1 –Need vs Speed chart



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The information obtained during the inspection is recorded in the Table below:

Station	Maximum auth speed (per Metrorail Quick Access Guide)	Sight distance from 8-car marker according to QAG	Ample Time Confirmed
Galley Place/ Chinatown	45 MHP	990'	Yes
Farragut North	50 MHP	1100'	Yes
Metro Center Red Line	50 MPH	1100'	Yes
Metro Center Green & Yellow	50 MPH	1100'	Yes
Judiciary Square	45 MHP	990'	Yes
Union Station	40 MHP	880'	Yes
Fort Totten Red Line	75 MHP	1650'	Yes
Fort Totten Green Line	65 MPH	1430'	Yes
Columbia Heights	50 MPH	1100'	Yes

Table 1 - inspection results

Note: The sighting distances observed by the WMSC were obtained from the platform and not the right of way.

No Safety concerns were identified during the inspection.

The WMSC verified at the stations observed that a Watchman/Lookout using Train Approach Warning (TAW) can provide ample time warning ensuring that workers reach a place of safety as required by the MOR book, specifically MOR rule 17.8.4.(a.).

Next Steps

Please respond by May 22, 2025, to acknowledge receipt.