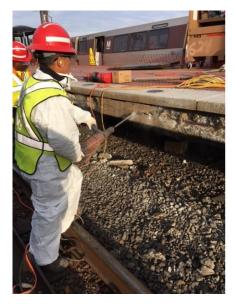
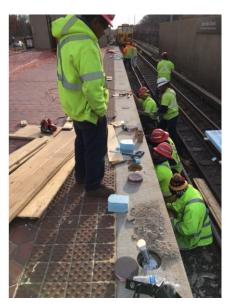
FOIA Exemption: All (b)(6)

Monthly Report SafeTrack Program Washington Metropolitan Area Transit Authority (WMATA)

December 2016 Progress







CIP 0024 SafeTrack Project – Force Account labor performing structural repairs to East Falls Church Track 1 platform edge during Surge 11 on December 2, 2016.

Photos courtesy of SafeTrack Team.

Final Submitted March 27, 2017

PMOC Contract Number: <u>DTFT60-14-D-00011</u>

Task Order Number: <u>006</u>, Project Number: <u>DC-27-5272</u>, Work Order No. <u>02</u>

OPs Referenced: 01, 25

Hill International, Inc. One Commerce Square 2005 Market Street, 17th Floor Philadelphia, PA 19103

PMOC Lead: Michael E. Radbill, P.E.

Length of Time PMOC Assigned to Project under current Contract: 2 years, 6 months

Length of Time PMOC Lead Assigned to Project: 4 Years, 10 months

TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
MAIN REPORT	8
APPENDICES	17
APPENDIX A – ACRONYMS AND ABBREVIATIONS	18
APPENDIX B – MAP OF WMATA'S RAIL TRANSIT SYSTEM	21
APPENDIX C – SAFETRACK WORK COMPLETED TO DATE	23
APPENDIX D – ORGANIZATION CHARTS & DESCRIPTION	24
APPENDIX E – SAFETRACK QC / QA COORDINATION PROCESS	26
APPENDIX F – SAFETY AND SECURITY CHECKLIST	27
APPENDIX G – ACTION ITEMS – SAFETRACK PROGRAM	32
APPENDIX H – SUMMARY SAFETRACK SCHEDULE	33

EXECUTIVE SUMMARY

This fifth monthly PMOC report for SafeTrack is based on information provided by WMATA at the oversight meeting held on January 17, 2017, and subsequent weekly updates. The PMOC concurs with WMATA's assessment of December progress as stated in its monthly report: ¹

During December, the SafeTrack program passed the halfway point, 6 months since launching in June 2016. Many key milestones were achieved, including the resubmission of the Project Management Plan, completion of the system-wide analysis of remaining defective ties and rescheduling of the remaining Safety Surges.

During Surge 11, 3 miles of running rail were replaced in just 3 weeks, an accomplishment that was facilitated by improved work planning and good weather. The rail replaced was original to the system and difficult to access due to the severe impact on service to work in this area. While only 1.5 miles long, Surge 11 work area has an extraordinary impact on the system as it reduces service across the entire Orange and Silver lines. Significant planning effort was spent to mitigate the impact to ridership, resulting in a more complex work zone pattern, but one that ultimately served the best interest of WMATA and its stakeholders. In addition to the rail replacements, almost 2,000 ties were replaced, bringing the total ties replaced to 28,452, 63% of the planned 45,500 ties for the entire SafeTrack program.

In addition to the physical work in the surge area, significant planning work was completed for the 'non- surge' work planned for January and early February. Work will be focused in the outer core, between Farragut North and Grosvenor as well as McPherson to Rosslyn. The non-surge windows include single tracking mid-day from 10 a.m. to 2:30 p.m. and evenings starting at 8 p.m. on the Red Line and 8:30 p.m. on the Blue/Orange/Silver Line, in addition to weekend work. Maintenance of these areas has fallen behind due to resource constraints. The ability to focus on these areas for 6 weeks will enable WMATA to address maintenance issues at these locations and be underground, mitigating the impact of winter weather on productivity.

Here is a summary of the PMOC oversight activities for December 2016:

- December 05 Collaborated with SafeTrack Team to advance the SafeTrack PMP.
- December 09 Conducted a site visit of SafeTrack's Surge 11; met with AGS TRST.
- December 20 Conducted the monthly SafeTrack oversight meeting.

A. Program Description

WMATA has indicated during the PMOC meetings that SafeTrack "addresses FTA and NTSB safety recommendations, will eliminate the backlog of track work, and will enable Metro to return to a steady-state of annual track and systems renewal projects. SafeTrack will accomplish this work by these work surges as well as by closing the system at midnight on weekends and expanding weekday maintenance opportunities. In addition, SafeTrack intends to carry forward lessons learned and improvements in work efficiency and productivity to future maintenance and

¹ WMATA's December SafeTrack Report to the PMOC dated January 13, 2017.

capital rehabilitation programs, after SafeTrack ends in mid-2017. The plan includes 15 "Safety Surges" that will utilize long-duration track outages through around-the-clock single tracking or line-segment shutdowns that will impact rush hour commutes."²

The majority of SafeTrack work is being performed by WMATA forces and is funded primarily through WMATA's Capital Improvement Plan CIP0024, Track Rehabilitation. Additional CIPs fund other related work during the SafeTrack surges. Federal funding sources include PRIIA (Passenger Rail Investment Improvement Act), §5307 Urbanized Area Formula, and §5337 State of Good Repair Formula. SafeTrack started on June 4, 2016; the present scope is scheduled to be completed in June 2017.

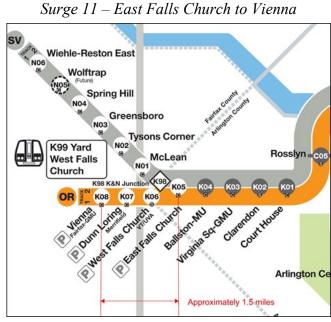
B. Program Status

As of December 31, 2016, SafeTrack completed 11 surges. These 11 concentrated on bringing nearly 42 miles of track along with related systems to a state of good repair on the Orange/Blue/Silver, Yellow/Blue, and Red Lines. Through eleven surges, WMATA's SafeTrack team has—

- Replaced 28,311 crossties
- Replaced 4,540 insulators
- Replaced 11,469 fasteners
- Replaced 35,020 linear feet of rail
- Replaced 22,712 feet of third rail cover board
- Repaired 32 emergency trip stations
- Repaired/replaced 932 tunnel lights
- Repaired/replaced 903 power cables
- Welded 393 rail joints
- Installed 9,501 feet of new grout pads
- Cleaned 108,996 linear feet of track bed
- Refurbished/replaced 2,631 IDW boxes
- Converted 71 wayside signals to use LEDs

December 2016 Activity

•Surge 11 – The eleventh surge, East Falls Church Station to Vienna Station on the Orange/Silver Line, began November 28, 2016, and successfully concluded on December 20, 2016, one day earlier than planned. All planned tasks were completed. During the surge, priority was given to repairing or replacing critical rail infrastructure that affects safety, train speeds, and ride quality. The main focus

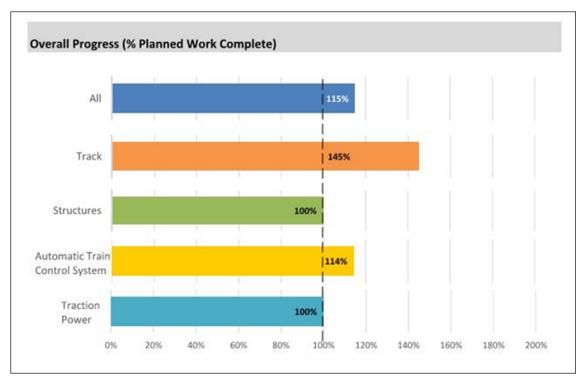


of the surge, according to the SafeTrack Team, "was to replace deteriorating crossties and old rail. In three weeks, crews replaced nearly 16,000 linear feet (3 miles) of rail, the most of any surge to date, and 8 times more rail than the average of Surges 1 through 10. Previously, this would have taken over three months to accomplish. The ATC crew also conducted regular

² From WMATA's SafeTrack Project Management Plan, Revision Zero, dated 10/30/16.

maintenance of intrusion detection warning (IDW) boxes. While station-to-station distance was only 1.5 miles long, Surge 11 had an extraordinary impact on the system because it significantly reduced service across the entire Orange and Silver lines. Significant planning went into mitigating the impact to ridership. This resulted in a more complex work zone pattern, with changes to the work area planned every weekend."³

- Surge 11 Accomplishments⁴
- Non-Surge Work The SafeTrack Team reported, "...significant planning work was completed for the non-surge work planned for January and February 2017, which will be focused in the outer core, between Farragut North and Grosvenor as well as McPherson to Rosslyn. The non-surge windows include single tracking mid-day from 10 a.m. to 2:30 p.m.



and evenings starting at 8 p.m. on the Red Line and 8:30 p.m. on the Blue/Orange/Silver Line, in addition to weekend work. Maintenance of these areas has fallen behind due to resource constraints. The ability to focus on these areas for 6 weeks will enable WMATA to address maintenance issues at these locations and be underground, mitigating the impact of winter weather on productivity."⁵

• **PMP Development** – FTA, PMOC, and the SafeTrack Team continued development of Revision 1 of the PMP through a teleconference on December 5, 2016.

³ WMATA's SafeTrack Monthly Report for December 2016, page 5.

⁴ WMATA's SafeTrack Surge 11 Detailed Report, dated December 29, 2016.

⁵ WMATA's SafeTrack Monthly Report for December 2016, page 1.

C. Core Accountability Information (Note: Italics shows a change from previous report.)

1. Cost

Cost – Current SafeTrack Budget (as of December 30, 2016)

Approved FY16-FY17 budget for SafeTrack:	\$133,226,892
Expended through <i>December 31</i> , 2016:	\$ 93,865,910
Percent expended:	70%

• The cost data shows 70% expenditure of budget. Though the percent of time expended is only 54%, this 70% is in line with surge completion since 16 surges are planned and 11, or 69%, of the surges have been completed. However, this analysis does not consider the cost of the non-surge work planned for January and February 2017. A clearer picture will emerge once the non-surge costs are accounted for next month.

<u>Cost – Forecast for SafeTrack (as of November 2016)</u>

Cost Forecast Category	Nov 2016 Forecast
Estimated total cost for SafeTrack work (Surges 1 thru 15):	\$ 110,548,464
Estimated total cost for track rehabilitation work outside surge areas:	\$ 4,962,407
Subtotal Estimated Cost (Surge and non-surge work):	\$ 115,510,871
Contingency:	\$ 17,661,436
Projected CIP0024 total cost during SafeTrack:	\$ 133,226,892

Cost – Summary of Funding for SafeTrack

Federal Fiscal Year	Funding Source	Amount
FFY15	PRIIA	\$ 37,243,759
FFY16	PRIIA	\$ 45,947,000
FFY16	§5337	\$ 10,000,000
FFY16	§5307	\$ 10,000,000
Subtotal	Federal Funding	\$103,190,759
	Short-term borrowing	\$ 30,036,133
Grand Total	All Sources	\$133,226,892

2. Schedule

- Original SafeTrack project completion date: June 2017
- Current forecast completion date: June 2017; Schedule of Surges 14 through 16 will be updated in January 2017
- Percent of time expended: 54%

3. Contingency & Budget

• It is important to understand that the SafeTrack project views contingency differently than how WMATA views contingency for one of its capital construction projects According to the SafeTrack PMP:

"There are zero contingency dollars budgeted in the SafeTrack Program. OMBS has the ability to manage any potential forecasted budget and/or funding shortfalls through adjustment of funding sources and capital budgets. If the forecast increases, funding will be rebalanced to ensure SafeTrack can continue. Between when the funding is requested and when it is allocated to a particular surge, the detail budget will hold this amount of money in contingency as unallocated budget."

WMATA's accounting software reports "unallocated budget" as contingency; therefore, this report will use contingency to represent unallocated budget.

- Contingency As of November 30, 2016, the amount in contingency was \$17,661,436. During December 2016, \$7,201,324 of contingency was expended leaving a contingency balance as of December 31, 2016 of \$10,460,112.
- There were no changes to the SafeTrack budget during December 2016.

D. Major Problems/Issues

NOTE: Issues are shown in regular type and their latest status is in *italics*. When an issue is closed, it will be marked CLOSED for the month it was closed. The issue will not appear in the report for the following month.

- 1. Status of Problems/Issues Identified in the PMOC's Previous Monthly Reports
 - a. <u>Ability to segregate SafeTrack surge expenses</u> from other concurrent maintenance expenses.

This issue was discussed at the January 17, 2016 oversight meetings. The SafeTrack team reported that surge expenses are tracked under CIP0024 subaccounts 00 through 22 in accordance with the Project Management Plan. CIP0024-01 is specifically utilized for CIP maintenance areas that are outside the current surge. Furthermore, concurrent track maintenance work done outside CIP0024 is billed to a general operating budget or other CIP budgets where applicable. Details of this tracking of costs are to appear in the January 2017 SafeTrack report.

b. Tracking and Completion of Punch List Work

WMATA is developing a procedure for the collection, reporting, and managing of post-surge punch list work. The procedure is titled, "SafeTrack Work Documentation Protocols." Revision 0 is dated 10/07/16. WMATA advised that it is working on revisions to this document and expects to issue Revision 1 by the end of January 2017. *No change since November 2016 report.*

c. Project Management Plan

The PMOC continued working with the SafeTrack Team to develop the PMP. Revisions were discussed during a teleconference on December 5, 2016. The PMOC received Revision 1 of the SafeTrack PMP for review on December 19, 2016, and plans to submit comments on Revision 1 to FTA and the SafeTrack Team in January 2017.

d. Safety

In December 2016, there were no OSHA recordable injuries⁶ in the Surge 11 area. Page 1 of WMATA's December 2016 Monthly SafeTrack Report reported that there was 100% compliance with requirements for wearing personal protective equipment (PPE). The graph of OSHA recordable injuries can be found in Section 6 Safety and Security of this report.

e. Grout for Grout Pads

This issue is the absence of field testing of newly installed grout for grout pads constructed during Surge 10. The issue was documented in a November 7, 2016 Daily Report. QICO followed up and addressed the issue in its Surge 10 Closeout Report dated December 12, 2016. According to the QICO report, "there is no reference to testing requirements for material poured for grout pad retrofitting in either the WMATA/TRST-1000 or Work Instructions for Track (WITK), two major documents that govern track maintenance and inspection." QICO noted that it "will provide assurance that acoustical testing will be performed for future Metrorail grout pad activities until a full grout pad testing program is established. As of December 30, 2016, a "full grout pad testing program" had not been established. The PMOC will continue to monitor this issue.

New Problems/Issues

f. There were no new issues/problems noted in December 2016.

⁶ An OSHA recordable injury is defined as:

Any work related fatality; any work related injury or illness that results in loss of conciousness, days away from work, or transfer to another job; any work related injury or illness requiring medical treatment beyond first aid; any work related diagnosed case of cancer, chronic irreversable diseases, fractured or cracked bones or teeth, and punctured eardrums; and other special criteria. (Source: www.osha.gov/recordkeeping)

MAIN REPORT

1. Program Status

The following table summarizes the status of the SafeTrack program as of December 31, 2016, based on reports submitted by WMATA.

SURGE No.	FROM – TO	ТҮРЕ	DAYS SURGING	APPROXIMATE TOTAL MILES		OVERALL %		
								COMPLETE
1	East Falls Church to Ballston	Single Tracking	13	2.4		100%		
2	Eastern Market & Minnesota Ave to Benning Road	Total Shutdown	16	2.0	2.0	100%		
3	Natl. Airport to Braddock Rd.	Total Shutdown	7	0.7	0.7	97%		
4	Pentagon City to Natl. Airport	Total Shutdown	7	1.3	1.3	100%		
5	East Falls Church to Ballston	Single Tracking	12		2.4	108%		
6	Single Spring to Takoma	Single Tracking	7	1.1		105%		
7	Shady Grove to Twin Brook	Single Tracking & Wknd Shutdown	12	4.4		95%		
8	Franconia-Springfield to Van Dorn Street	Single Tracking	17	3.7	3.7	140%		
9	West Falls Church to Vienna	Single Tracking Wknd Shutdowns	42	5.2	5.2	111%		
10	NoMa Gallaudet U to Fort Totten	Total Shutdown	29	1.3	1.3	133%		
11	East Falls Church to West falls Church	Single Tracking	23	1.5	1.5	115%		
N/A	Non-Surge Work on Red Line and Orange/Blue/Silver Line							
12	Rosslyn to Pentagon							
13	Braddock Rd to Huntington & Van Dorn Street							
14	Greenbelt to College Park		_					
15	Minnesota Avenue to New Carrollton							
	Totals to Date		184	22.1	16.6	109%1		
Note 1: A	Note 1: Average of the 10 surges on which WMATA has reported.							

This next table shows the magnitude of the results of the 11 surges completed over nearly 40 miles of track through December 20, 2016. See Appendix C for a more inclusive list of accomplishments for each surge.

ACTIVITY	MEASURE	QUANTITY TO DATE
Replace Crossties	each	28,311
Replace Fasteners	each	11,469
Replace Insulators	each	4,540
Weld Rail Joints	each	393
Replace Running Rail	linear feet	30,266
Rebuild Grout Pads	linear feet	9,501
Third Rail Cover Board	linear feet	22,712

Work Completed in December 2016

• Surge 11, Orange/Silver Line, East Falls Church to Vienna – This 24-day surge started Tuesday, November 28, 2016, and was scheduled to finish on Thursday, December 21, 2016. As reported in WMATA's December 2016 SafeTrack report, "[f]rom the beginning of the surge, rail replacement progressed better than planned. As a result, all the planned Track 1 rail was replaced and destressed during the first week, eliminating the need to return to Track in phase 11D as planned. All the planned scope for Track 2 was completed earlier than scheduled as well. However, further inspection determined there were ten more 390' rail stringers in need of replacement. It was decided to stay on Track 2 and complete these additional rail replacements. With the favorable weather aiding in better progress of the rail replacement, Surge 11 was able to complete on Tuesday December 20, one day earlier than planned, and complete 35% more rail than planned (15,795 linear feet vs 11,700 lf)." The following table shows the actual work WMATA accomplished during Surge 11.

Surge 11 Accomplishments

	Task	unit	Completed During Surge
Track	Crosstie renewal	# crossties	1,937
	Insulator replacement	# insulators	213
	Ballast renewal	# tons	700
	Tamping	# linear feet	12,500
	Third Rail maintenance	# linear feet cover board	3,450
	Joint elimination	# joints welded	50
	Rail replacement	# linear feet	15,795
Structures	Manhole Cover	# covers	23
Automatic Train	Intrusion Detection Warning System (IDW)		
Control System	refurbishment and replacement	# boxes	366
Traction Power			
System	Power Cable repair/replacement	# cables	106

• Also in December, WMATA completed the planning for the non-surge work planned for January and February 2017. According to its December 2016 report, "SafeTrack and Mobile Command developed preliminary maps for the 'C' Line (Orange/Blue/Silver Line) and 'A' Line (Red Line) indicating possible work limits using existing logical segments in the Traction Power contact rail as well as the Automatic Train Control signaling system. These initial work limits were then shared with ATC and Power Engineering to confirm feasibility. Initial work limits were used for the work groups to develop their scopes of work (SOW) as well as to establish the general plan for train service. SOWs from each group were used to plan material and labor needed for the period. It was determined that most of the work would be performed under supervisory track rights with shutdowns on the weekends. Work Zone Access and Employee parking were determined simultaneously. Final maps and working limits were issued to the work groups. Track Rights were submitted and verified in GOTRS.

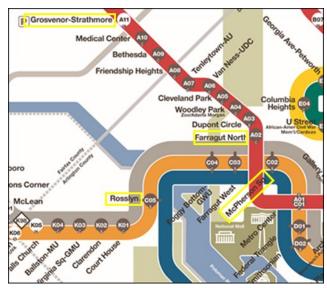
"As part of developing the scope for the Structures Department, SafeTrack initiated discussions with WMATA Engineering to develop alternatives methods for grout pad replacement, to enable work to proceed without disrupting rush hour service."8

⁷ WMATA's SafeTrack Monthly Report for December 2016, page 5.

⁸ WMATA's SafeTrack Monthly Report for December 2016, page 6.

Work Planned for January – February 2017

SafeTrack crews plan to work in nonsurge areas on the 'A' Line (Red Line), focusing on the outer core, between Grosvenor and Farragut North. The plan is to remove mud and debris, fix leaks, replace and weld rail and replace fasteners. Work will also begin on the 'C' Line (Orange/Silver/Blue Line) from Rosslyn Station to McPherson Square Station. "C" Line work Planned includes demolishing, forming and pouring new grout pads, replacing fasteners, and replacing and welding rail. Quantities of fasteners, ties, and grout pads planned in non-surge areas are included in the table below. The SafeTrack Team will continue



to plan future surges, focusing on the next surge, Surge 12 from Rosslyn to Pentagon. Layout for Surge 12 will begin in January. Also in January, the maintenance departments will continue their focus to closeout punch list work identified at the conclusion of Surges 10 and 11.

- The PMOC reported in the September 2016 SafeTrack report that WMATA is developing a procedure titled, "SafeTrack Work Documentation Protocols." Revision 0, dated 10/07/2016, was provided to the FTA on 10/07/2016. The document is being refined with further input from SafeTrack, the working departments, and QICO. SafeTrack reported that WMATA continues to review the procedure. The procedure is expected to be published on January 31, 2017.
- The SafeTrack Team conducted extensive planning for non-surge work to be performed during January-February. The work that could be quantified is listed in the following table. In addition, maintenance crews planned to repair leaks at hundreds of locations as well as vacuum and snake main and side drains. Low voltage maintenance crews planned to repair/replace edge, track bed, and tunnel lights. ATC crews planned to repair/replace signal LEDs; refurbish push buttons; and repair, test, and/or replace track and interlocking junction boxes.⁹

Non-surge Work Planned - January/February 2017					
Activity Measure Planned Actual					
Replace Crossties	Each	0	TBD		
Replace Fasteners	Each	8,160	TBD		
Rebuild Grout Pad	Linear feet	12,7959	TBD		
Replace Rail	Linear Feet	1,950	TBD		
Weld Rail Joints	Each	20^{9}	TBD		

-

 $^{^9}$ Source of planned quantities is pre-surge documentation provided by SafeTrack Team to PMOC through Scope of Work documents for both A Line and C Line.

2. Program Cost

SafeTrack Program (as of December 31, 2016)

Preliminary Estimated Budget	Approved Safe		Expenditures Thru	Percent of Budget
Tremmary Estimated Budget	FY16-FY17 Budget		December 31, 2016	Expended
\$118, 797,984	\$133,226,892 <i>\$ 93,865,910 70%</i>			70%
Discussion of Variances	There are no variances.			
Discussion of Funding sources	Funding for SafeTrack is from Passenger Rail Investment and Improvement Act (PRIIA), §5307 & §5337 formula funds, and short-term borrowing.			
Contingency	\$10,460,112 \$7,201,324 of contingency was used in December 2016.			

3. Program Schedule

For surges 1 through 11, the bar chart in Appendix "H" reflects actual dates the work was accomplished. The schedule also shows WMATA's plan for Surges 12 and 13. The dates for Surges 14, 15, and 16 are to be announced.

4. Environmental Mitigation Measures

During each surge, WMATA continues to perform maintenance on drainage facilities and clean up trash along the track right of way.

5. Program Management Capacity and Capability

At the January 17, 2017 monthly PMOC oversight meeting, the Director for SafeTrack announced that Ms. Tiffani Rhodes-Jenkins, started working as Project Manager the week beginning January 16, 2017. According to the Director, SafeTrack, Ms. Rhodes-Jenkins will be responsible for the overall definition and management of the work area for each track work event, in particular working with Engineering, ROCC and SAFE to develop the work area configurations and service patterns. She will also ensure the appropriate documentation and execution of track rights in GOTRS, including resolving potential conflicts through the upfront planning and coordination of piggy-backing work groups. She will work closely with Bill Baker, who will continue in the SafeTrack Coordinator role to coordinate site logistics, permits and work zone access. Ms. Rhodes-Jenkins brings over a decade of experience in WMATA working in Traction Power Engineering, SAFE and the MOC, making her an invaluable addition to the SafeTrack team.

6. Quality Assurance/Quality Control (QA/QC)

• Quality Plan – Rather than have a separate Quality Plan, PMP *Section 10*, Quality Control and Quality Assurance, references existing WMATA quality documents and describe the process by which the various responsible WMATA departments control and QICO assures the quality of the work. *In brief, Section 10 of the PMP states in part:*

[SafeTrack's approach to quality] is tailored to fit the needs of the program, which is to accelerate work performed without undermining the accountability of the Directors responsible for the work. The SafeTrack quality program maintains the independence and accountability of each [Maintenance] Office's quality processes as much as possible. The [Maintenance] Office performing the work maintains primary responsibility to ensure it is performed in accordance with WMATA SOP's and the standards listed in Section 10.2 [SafeTrack Quality Control & Reference Standards]. At a summary level, the responsibilities are allocated as follows, using the concept of the first and second lines of defense:

- Quality Control (QC) is the 1st Line of Defense: Maintenance Management performs quality control verification and validation tasks:
 - Monitor work Quality
 - Perform QC Inspection
 - Complete and Sign QC Records
 - Maintain Records
- Quality Assurance (QA) is the 2nd Line of Defense: QICO verifies the quality of the work and the effectiveness of the QC program through the following activities:
 - Pre Surge inspections and reporting
 - Random, periodic, and targeted inspections and reporting
 - Sample Inspections of Quality Controlled work
 - Defect tracking log
 - Final walk through inspection and reporting
 - Close out report
 - Follow-up on Open Items

The PMP also includes a chart of QA/QC activities performed by both the maintenance groups and the Office of Quality and Internal Compliance (QICO). The maintenance groups involved in SafeTrack are listed in the table below. The QA/QC chart is included in Appendix E of this report. It provides a picture of the comprehensiveness of QICO's pre-surge inspection.

WMATA Maintenance Department	Letter Reference
Automatic Train Control	ATCM
Track	TRST
Structures	TRST
Communications	COM
Traction Power Maintenance	TRPM
Information Technology	IT
Plant Maintenance	PLNT
Material & Inventory Planning	MIPN

• Quality Reference Standards – The following table shows WMATA's standards documents, listed by department (in bold), that apply to the quality of maintenance work performed on SafeTrack work.

TRST:	TRST: Track & Structures			
0	WMATA 1000 Maintenance & Inspection Manual	2014		
0	WMATA 2000 Track Structure Maintenance Control Policy	2015		
ATCS:	ATCS: Automatic Train Control			
0	ATC 1000Automatic Train Control Instructions for Testing and	2016		
Inspection of ATC Apparatus and Systems				
0	ATC 2000 System Integrity Maintenance Practices	2014		
0	ATC 3000 Preventive Maintenance Instructions and Technical	2016		
	Procedures Manual			

IT-NCS: Information Technology-Networks Communications Services

- Information Technology, SOP IT-NCS-OPS-001 Emergency Trip Station(ETS)
- o Preventive Maintenance Inspection (PMI)

2016

- Pre-Surge Inspection for Surge 11 Following inspection of the Surge 11 area by the maintenance departments, which is used to develop the scopes of work for the surge, QICO conducted its pre-surge inspection of the Surge 11 area on November 25, 2016. QICO's inspection involved visual observation, physical measurements, notation of tolerances or dimensions, pictures and video. Items of interest or concern were documented in the QICO Pre-Surge Report. QICO then performs gap assessments between QICO observations and the maintenance departments' scopes of work to determine the need for departments to modify scopes if they are found to be lacking of the items identified by QICO. Upon completion of a surge, the Pre-Surge Report is used as the baseline standard and assurance tool through which deficiencies can be measured and confirmed as being corrected.
- <u>During the Surge</u> According to the SafeTrack report for December 2016, the Quality activities for Surge 11 focused on tie replacement and remediation, running rail replacement, destressing Continuous Welded Rail (CWR), thermite welding, contact rail and cover board replacement and Intrusion Detection Warning (IDW) system and Emergency Trip Station (ETS) inspections and repairs. QICO conducted daily visual inspections, capturing measurements as well as photos and videos of both completed work and work underway. These activities are documented in the Daily Quality Assurance Report and discrepancies are added to the Surge Tracking Log. The Tracking Log follows Maximo Work Orders; QICO is working with the maintenance departments to standardize and organize the Maximo Work Orders defining work descriptions and sub-tasks.

The QICO Daily Quality Assurance Report contains a section for "areas of concern" where potentially systematic issues related to quality, condition, and safety are recorded. The concerns are logged into the Surge Tracking Log for follow up and close out. Items in the Tracking Log are classified by level of severity/priority as "high", "medium", and "low."

Post-Surge – At the completion of each Surge, QICO performs a final track walkthrough of the completed surge area of operation, following up on status of open items on the Surge Tracking log. The final observations reference the Pre-Surge Report. QICO conducted the Closeout Walkthrough for Surge 11 on 12/19/2016. There were no medium or high priority items left open on QICO's Tracking Log at closeout. QICO concluded in its "Final Track Walkthrough Report that, "the SafeTrack Surge 11 working limits are safe to return to revenue service."

Three reports are generated after each surge:

 SafeTrack generates the "Punch List Report." This is a compilation of the punch lists generated by each work group. The Punch List Report is a report of inscope work not accomplished in each surge and any defects in the work performed found by QICO after the completion of the surge (also noted in the

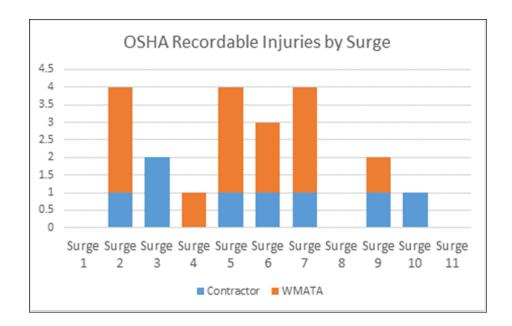
¹⁰ QICO SafeTrack Report, Surge 11, No. ST-20161220-11, Final Walkthrough, Dec 19, 2016.

- Sampling and Verification Report). Following Surge 11, only one item was posted to the Punch List: power for an ETS box.
- QICO generates the final "QICO Sampling and Verification Report." All defects captured during sampling are added to the compiled Punch List Report.
- QICO then generates a "<u>Closeout Report</u>," which includes a summary of what happened during the surge, wins/losses and a set of recommendations, discrepancies tracked during the surge, and all daily reports from QICO field team inspectors.
- The SafeTrack coordination team has developed SafeTrack Work Documentation Protocols, Revision 0, and dated 10/07/2016. This document describes the process for documenting the work delivered by the SafeTrack Surges. It references the use of the "Maximo Asset Management Module" for tracking surge punch list items. Documentation is discussed further in *the draft* Revision 1 to the SafeTrack PMP.
- Project Audit QICO reported that it will publish the project/program audit schedule early in 2017. The SafeTrack audit will measure how well the SafeTrack Coordination Team and WMATA departments follow the project management plan and the various WMATA procedures regarding contract administration, procurement, safety, security and quality.

7. Safety and Security

- Safety is addressed in two WMATA documents: Metrorail Safety Rules and Procedures Handbook (MSRPH) and Roadway Worker Protection Manual (RWPM). The PMOC and FWSO have reviewed available documents and completed the FTA's Safety and Security Checklist shown in Appendix F of this report.
- As a part of its safety and security program, WMATA has developed an outreach program to keep the public appraised of the plans for each surge. As a part of the outreach program, the WMATA public outreach team continues to inform riders about the upcoming surges and the impact to their commute. Informational material is provided to explain safety risks, train delays, bus schedules, and contact information available to the riders.
- The SafeTrack Team tracks OSHA recordable injuries by surge. Surge 11 is the third surge that experienced no OSHA recordable injuries as shown in the following chart provided by the SafeTrack Team ¹¹

¹¹ SafeTrack Monthly Update to FTA PMOC – December 2016, January 13, 2017.



• In addition to tracking recordable injuries, SafeTrack has been tracking worker compliance with requirements for wearing personal protective equipment (PPE). SafeTrack reported PPE compliance in the following table:

Person	Personal Protective Equipment Compliance							
	Hard Hats	Footwear	Reflective Shirt	Safety Glasses	Working Radio			
Sept	99%	100%	100%	89%	100%			
Oct	98%	100%	100%	96%	100%			
Nov	99%	100%	100%	98%	100%			
Dec	100%	100%	100%	100%	100%			

8. Contract Administration

• Administration of third-party contracts related to SafeTrack is the responsibility of the Department responsible for the work. Section 18-21¹² of WMATA's Procurement Procedures Manual, states that the WMATA "Contracting Officer may, at her/his discretion, appoint a Contracting Officer's Technical Representative/Contracting Officers Representative (COTR) and a Contracting Officer's Representative (COR). The COTR/COR is responsible to the Contracting Officer, and performs contract administration functions specifically delegated in the letter of appointment from the Chief Procurement Office." Section 18-21 further states that "[i]ndividuals appointed as COTR/COR are responsible to the Contracting Officer for proper performance of duties. This includes timely notification to the Contracting Officer of all significant events affecting contract performance, delivery, or price. Supervisors of individuals appointed as COTR/COR are responsible for assuring that their subordinate satisfactorily performs

¹² Procurement Procedures Manual, Washington Metropolitan Area Transit Authority, August 4, 2015, Page 280.

assigned duties." For CIP00024, which includes SafeTrack activities, a COTR has been appointed and is under the supervision of the General Superintendent of the Track and Structures (TRST) Department. The primary contracts supporting SafeTrack work activities are between WMATA and the following:

■ G.W. Peoples

Unitrac Railroad Materials

Crane Masters, Inc.

Progress Rail

Crane Services Company, Inc.

Stella Jones Corporation

• DBE Participation – The PMOC requested a summary of the DBE goals for the SafeTrack program, which SafeTrack Team provided at the January 17, 2017 monthly meeting. The following table, provided by the SafeTrack Team shows the DBE goals. In future monthly reports, PMOC expects to report progress on achieving these goals.

Contract Number	Name of Prime Contractor	DBE Participation Goal
FQ13027A	Lewis Bolt	5.0%
FQ13027C	Pandrol USA,LP	5.0%
FQ14103	G.W. Peoples Contracting Co., Inc.*	DBE Prime
FQ15083	Unitrac Railroad Materials	1.5%
FQ16128	Stella -Jones Corporation	5.0%
FQ17011	G.W. Peoples Contracting Co., Inc.*	DBE Prime
FQ16119	Progress Rail Services	2.0%
FQ12201	Davis Freight	5.5%
FQ13027C	Langley Traffic Services	5.0%
FQ15083	Curdco, LLC	1.50%

9. Program Risk

• The SafeTrack management team has published a two-page risk register in Revision 1 to its draft PMP. The SafeTrack Risk Register includes a mitigation/response plan for each risk identified. This risk register *was* reviewed by the PMOC as a part of the review of the entire Revision 1 PMP. *The PMOC had no comments on the Risk Register*.

10. Action Items

• Action Items are shown in Appendix G of this report.

APPENDICES

APPENDIX A – ACRONYMS AND ABBREVIATIONS	18
APPENDIX B – MAP OF WMATA'S RAIL TRANSIT SYSTEM	21
APPENDIX C – SAFETRACK WORK COMPLETED TO DATE	23
APPENDIX D – ORGANIZATION CHARTS & DESCRIPTION	24
APPENDIX E – SAFETRACK QC / QA COORDINATION PROCESS	26
APPENDIX F – SAFETY AND SECURITY CHECKLIST	27
APPENDIX G – ACTION ITEMS – SAFETRACK PROGRAM	32
APPENDIX H – SUMMARY SAFETRACK SCHEDULE	33

APPENDIX A – ACRONYMS AND ABBREVIATIONS

ACC Air Conditioner Condenser (a rooftop or a ground-mounted unit)

Americans with Disabilities Act ADA AGMWMATA Assistant General Manager AGS Assistant General Superintendent **AGT** Aboveground Storage Tank

Air Handling Unit **AHU**

Assistant Project Manager APM

Authority Representative's Facility ARF

ARRA American Recovery and Reinvestment Act

Aboveground Storage Tank AST **Automatic Train Control** ATC

ATCMAutomatic Train Control Maintenance Department

ATO **Automatic Train Operation**

Best and Final Offer **BAFO**

Bus Fleet Management Plan **BFMP** Office of Bus Maintenance **BMNT**

Best Management Practice for storm water (by Maryland Dept. of Environment) **BMP**

BOM Bill of Materials

Bus Operations and Maintenance Facility **BOMF** C-35A WMATA Form for Work Authorization

Conditional Acceptance CA

CCB Car Control Building at New Carrollton Rail yard

CCTV Closed Circuit Television Chief Engineer Infrastructure CENI CIP Capital Improvement Program

CMF Car Maintenance Facility (a building in a rail yard)

CMB Car Maintenance Building **CNG** Compressed Natural Gas

COMCommunications Maintenance Department CORContracting Officer's Representative

Contracting Officer's Technical Representative COTR

COUN WMATA's Office of General Counsel Critical Path Method (Schedule) CPM

CPDO

Capital Project Delivery Office (office responsible for the SIRP) **CPMO** Capital Project Management Office

CPN Contractor Proposal Number **CSP** Construction Safety Program

CSX The name of a Class 1 Freight Railroad

Coordinated Work Plan **CWP**

D-B Design-Builder

Distributed Antenna System DAS

District of Columbia Department of the Environment **DDOE**

DEF Diesel Exhaust Fluid

ENSS WMATA Engineering Support Services

Emergency Trip Station ETS

Force Account FA

FACP Force Account Capital Projects

FFY Federal Fiscal Year

FTA Federal Transit Administration

FWSO FTA's WMATA Safety Oversight Office FY Fiscal Year (Typically refers to WMATA) GOTRS General Orders/Track Rights System

HAZMAT Hazardous Materials

HVAC Heating, Ventilating, and Air Conditioning

IDW Intrusion Detection Warning ICE Independent Cost Estimate

IEEE Institute of Electrical and Electronic Engineers

IFC Issued for Construction

IRPG Infrastructure Rehabilitation Program

IT WMATA's Information Technology Department

JOC Job Order Contract

LEED Leadership in Energy and Environmental Design

LOTO Lock-Out-Tag-Out

MAXIMO WMATA's Enterprise Maintenance Management System

MCAP Major Capital Project (as defined by WMATA)

MCX Medical Center Crossover

MIPN Material and Inventory Planning Group

MOW Maintenance of Way, a personnel qualification by CSX MSRPH Metrorail Safety Rules and Procedures Handbook

NCN Non-conformance Notice NOV Notice of Violation NTP Notice to Proceed

OMBS WMATA's Office of Management and Budget Services

O&M Operation and Maintenance

OFS Order for Services

O/B 1 Orange/Blue Lines 1 Contract

OSHA U.S. Occupational Safety and Health Administration

PA Public Address

PCCI Potomac Construction Company, Inc.

PCN Proposed Change Notice (from the contractor)

PCO Pending Change Order

Pepco Potomac Electric Power Company

PG Prince George's (County)
PLNT Office of Plant Maintenance

PM Project Manager

PMOC Project Management Oversight Consultant

PMP Project Management Plan
PPE Personal Protective Equipment
PPLE Program, Planning and Energy

PRIIA Passenger Rail Investment and Improvement Act of 2008

PRMT WMATA's Office of Procurement

QA Quality Assurance QAP Quality Assurance Plan

QICO WMATA's Department of Quality and Internal Compliance Operations

QPRM Quarterly Progress Review Meeting
RAMP Real Estate Acquisition Management Plan

RF Radio Frequency

RFMP Rail Fleet Management Plan

RFP Request for Proposal
RFQ Request for Qualifications
RSA Rail Service Adjustment
RTU Remote Terminal Unit

RWPM Roadway Worker Protection Manual
SCADA Supervisory Control and Data Acquisition

S&I Service and Inspection

SCI Substantial Completion Inspection SCWG Safety Certification Working Group

SOW Scope of Work

SHPO State Historical Preservation Office

SIRP Systemwide Infrastructure Rehabilitation Program S/O Switch Order (needed for removal of AC power)

SOA State Oversight Agency (for Safety and Security) [formerly SSOA]
SPM Senior Program Manager (Most senior WMATA manager on a project)

SSCP Safety and Security Certification Plan

SSCMP Safety and Security Certification Management Plan

SSMP Safety and Security Management Plan

SSP System Security Plan

SSPP System Safety Program Plan SSPS System Safety Program Standards

SSWP Site Specific Work Plan

T&E Trainman and Engineman, a personnel qualification by CSX TAES Track Allocation & Escort Support Office at WMATA

TAMS Transit Asset Management System
TASS Track Access Support Services

TBDTo Be DeterminedTBSTiebreaker StationTCRTrain Control Room

TPSS Traction Power Substation

TRPM Traction Power Maintenance Department
TRST WMATA's Department of Track and Structures
TSSM Track and Structures – System Maintenance
TTCF Test Track and Commissioning Facility

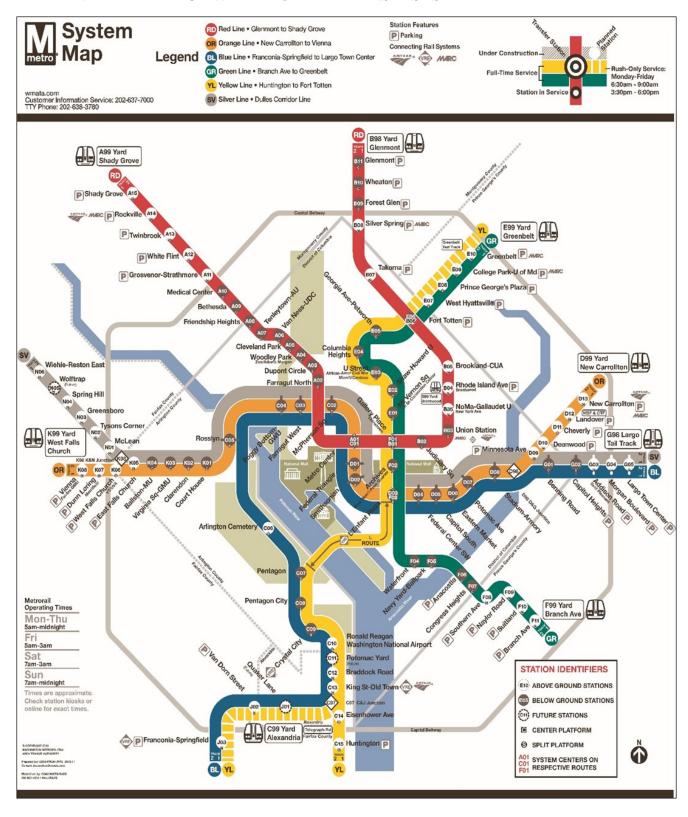
TUN Temporary Use Notice

TVA Threat Vulnerability Analysis
UPS Uninterrupted Power Supply
UST Underground Storage Tank
VEF Ventilation & Exhaust Fans
WITK Work Instructions for Track

WMATA Washington Metropolitan Area Transit Authority WSSC Washington Suburban Sanitary Commission

YOB Yard Operations Building

APPENDIX B – MAP OF WMATA'S RAIL TRANSIT SYSTEM



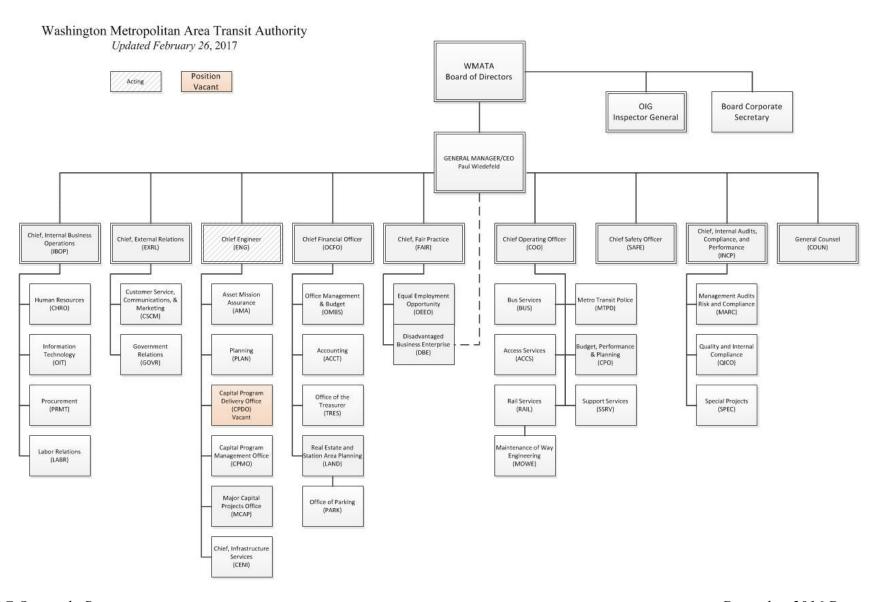
APPENDIX C - SAFETRACK WORK COMPLETED TO DATE

As of December 31, 2016

Surge No.	Miles in Length ¹		Insulator Renewal (each)		Stringer Rail Renewal (feet)	Joints Welded (each)	Grout Pad Renewal (feet)	Tunnel Light Repair (each)	Power Cables (each)	Third Rail Cover Board (feet)	IDW Boxes (each)	Signal Conversion to LED (each)	Track Bed Cleaning (feet)	Emergency Trip Station Repair (each)
1	2.4	1,856	541	2,214	3,184	16		17	54	410	208	0	3,150	0
2	4.0	533	235	2,116	1,745	22	2,005	140	183	642	0	12	3,160	13
3	1.4	1,327	233	1,062	78	6	800	355	20	170	0	0	0	19
4	2.6	81	31	2,463	2,730	26	959	178	54	310	0	0	3,200	0
5	2.4	1,405	121	2,369	4,680	24	0	242	79	820	0	0	5,110	0
6	1.1	1,311	496	0	312	14	0	0	20	1,280	0	0	8,129	0
7	4.4	3,572	1,120	0	0	6	0	0	72	2,000	62	12	1,692	0
8	7.4	7,102	353	0	0	27	0	0	52	230	500	16	16,180	0
9	10.4	7,159	402	0	4,758	97	0	0	225	8,490	1,090	16	30,021	0
10	2.6	2,028	795	1,245	1,738	105	5,737	0	38	4,910	405	15	38,354	0
11	3.0	1,937	213	0	15,795	50	0	0	106	3,450	366	0	0	0
12														
13														
14														
15														
Totals	41.7	28,311	4,540	11,469	35,020	393	9,501	1,362	903	22,744	2,631	76	108,996	32
		,			,			uring the sure					100,550	5-2

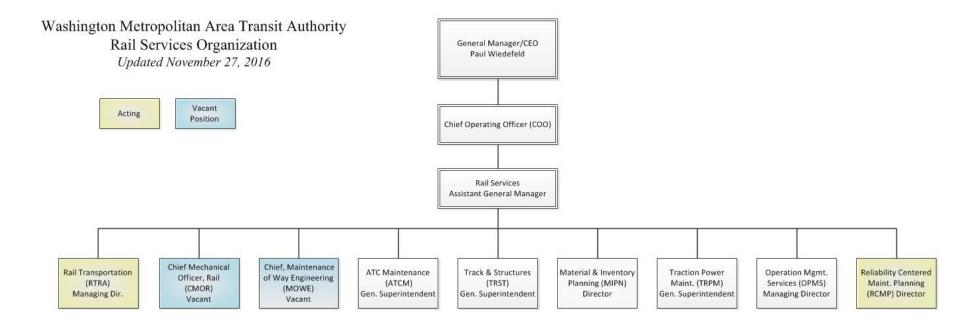
Note 1: Miles are computed by adding length of track 1 and track 2 rehabilitated during the surge. See other table for breakdown of each surge.

APPENDIX D - ORGANIZATION CHARTS & DESCRIPTION

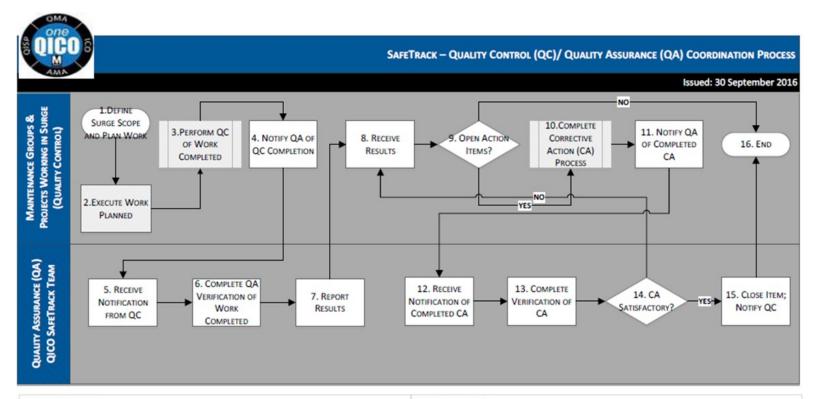


PMOC Oversight Report on WMATA's SafeTrack Program

WMATA'S RAIL SERVICES GROUP



APPENDIX E – SAFETRACK QC / QA COORDINATION PROCESS



QC REQUIREMENTS

- Maintenance Groups are responsible for performing Quality Control (QC) and ensuring it is performed in accordance with WMATA procedures and requirements, including having senior personnel conduct QC inspections as part of the work process.
- Quality Control (QC) is the responsibility of the maintenance group performing the work.
- Managers and Supervisors of Maintenance groups shall review the Quality Assurance Summary Report to identify issues, address issues and provide written responses to OA.
- Managers and Supervisors of maintenance groups will work with QICO to plan the timing of QA sampling inspections.
- Managers and Supervisors of maintenance groups will notify QICO when QC checks are complete.
- Managers and Supervisors of maintenance groups will create a punch-list for any
 corrective actions and/or issues that need to be resolved.

OA REQUIREMENTS

- Quality and Internal Compliance (QICO) is responsible for performing Quality Assurance (QA) and serves as the independent verification of the entire work process, including spot checks to confirm the quality of the work performed.
- QICO will perform QA sampling inspections of ~20 25% of a designated SafeTrack Surge area.
- QICO will produce daily observation reports (Quality Assurance Summary Report) that
 provide feedback for the work teams, to help drive the focus on quality and safety.
- QICO will perform QA as soon as practical after the work maintenance group has completed QC checks.
- QICO will perform QA sampling inspections during the outage (where possible), provided that the QC check is completed by the assigned maintenance group and there is sufficient time prior to the pre-revenue testing process.
- QICO may inspect areas not inspected during the surge within the next 48 hours so
 that any issues found can be added to the punch-list for the work teams and
 lessons learned can be carried forward in to the next outage.

Project Overview	SafeTrack Program								
Project Mode	Rail								
Project Phase	Construction								
Project Delivery Method	Force Account & Third Party Contractor								
Project Plans	Version	Review By FTA	Status						
Safety and Security Management Plan (SSMP)		N/A	SSMP not required for SafeTrack, FTA C 5800.1 4. Applicability.						
Safety and Security Certification Plan (SSCPP)	March 2015	Pending	The March 2015 SSCP or a project specific SSCP was not issued to FTA.						
System Safety Program Plan (SSPP)	January 2017	Yes FWSO	Draft SSPP submitted to FWSO and currently under review.						
Security and Emergency Preparedness Plan (SEPP)	2014	Pending	This SSI document must be reviewed on site. The last TOC Letter dated September 3, 2014 approved WMATA's 2014 SEPP.						
Construction Safety and Security Plan (CSSP)	March 2013	Y	WMATA "Construction Safety and Environmental Manual" provides guidelines for WMATA construction, maintenance, and rehabilitation projects. Contractors are required to submit individual plans. WMATA employees follow safety rules outlined in their MSRPH.						

AREA OF FOCUS	Y/N	NOTES/STATUS					
Safety and Security Authority							
Is the Project Sponsor subject to 49 CFR Part 659 State Safety Oversight Requirements?	Y	FTA WMATA Safety Oversight (FWSO) has temporary direct responsibility and oversees any TOC activities. FTA "Oversight and Surveillance Plan" Version 1.7, September 2, 2016, defines responsibilities, requirements, processes, and activities to implement FTA's direct safety oversight of the WMATA Metrorail system and to ensure that these goals are achieved.					
Has the State designated an oversight agency as per Part 659.9?	Y	TOC was designated per 659.9, and performs oversight responsibilities as directed by FWSO. See notes/status above.					

Has the oversight agency reviewed and approved the Project Sponsor's Security Plan or SSPP as per 49 CFR Part 659.17?	Y	WMATA SSPP January 2015 was reviewed and approved by TOC. WMATA SSPP DRAFT 2017 has been received by FWSO and is currently under review.
Did the oversight agency participate in the last Quarterly Program Review Meeting?	Y	The FWSO did attend the QPRM held on November 14, 2016.
Has the Project Sponsor submitted its safety certification plan to the oversight agency?	No	The SSCP of March 20, 2012, was accepted by TOC on April 2012, however a March 2015 version is noted in the DRAFT 2017 SSPP that has not been provided to FTA.
Has the Project Sponsor implemented security directives issued by the Department Homeland Security, Transportation Security Administration?	N/A	DHS Coordination is to be addressed in Section 11 of the SSMP. A SSMP is not required for SafeTrack, FTA C 5800.1 4. Applicability.
SSMP Monitoring		
Is the SSMP project-specific, clearly demonstrating the scope of safety and security activities for this project?	N/A	WMATA's SSPP applies to this work instead of a separate SSMP.
Does the Project Sponsor review the SSMP and related project plans to determine if updates are necessary?	Open	PMOC coordination with and input from FWSO will determine this.
Does the Project Sponsor implement a process through which the Designated Function (DF) for Safety and DF for Security are integrated into the overall project management team? Please specify.	Open	PMOC working with FWSO is reviewing this.
Does the Project Sponsor maintain a regularly scheduled report on the status of safety and security activities?	Y	SafeTrack Monthly Reports issued to FWSO include a safety section with trends of increased RWP, personnel PPE compliance, OSHA recordable injuries by surge, etc.
Has the Project Sponsor established staffing requirements, procedures and authority for safety and security activities throughout all project phases?	Y	SSPP Section 3.0 and Appendix E.
Does the Project Sponsor update the safety and security responsibility matrix/organizational chart as necessary?	Y	SSPP is updated annually.
Has the Project Sponsor allocated sufficient resources to oversee or carry out safety and security activities?	Y	Two safety officers are assigned to construction safety by SAFE. The conduct field observations, inspections of work area, and compliance checks.

Has the Project Sponsor developed hazard and vulnerability analysis techniques, including specific types of analyses to be performed during different project phases?	Y	Section 6 of SSPP defines Hazard Management Program.
Does the Project Sponsor implement regularly scheduled meetings to track resolution of any identified hazards and/or vulnerabilities?	Y	FWSO holds weekly meetings with WMATA staff to address safety events, corrective action implementation, and other hazards.
Does the Project Sponsor monitor the progress of safety and security activities throughout all project phases? Please describe briefly.	Y	Two safety officers are assigned to construction safety by SAFE. The conduct field observations, inspections of work area, and compliance checks.
Does the Project Sponsor ensure the conduct of preliminary hazard and vulnerability analyses? Please specify analyses conducted.	N/A	SafeTrack is a maintenance activity with an existing system.
Has the Project Sponsor ensured the development of safety design criteria?	Y	WMATA Manual of Design Criteria for Maintaining and Continued Operation of Facilities and Systems.
Has the Project Sponsor ensured the development of security design criteria?	Y	Incorporated into WMATA Manual of Design Criteria for Maintaining and Continued Operation of Facilities and Systems.
Has the Project Sponsor ensured conformance with safety and security requirements in design?	Y	Materials are physically received by each Department's Materials Controls Group. The Materials Controls Group, briefed by the COTR regarding contract requirements, performs a physical inspection for accuracy and quality of the delivered order.
Has the Project Sponsor verified conformance with safety and security requirements in equipment and materials procurement?	Y	QICO performs quality inspections.
Has the Project Sponsor verified construction specification conformance?	Y	QICO tracks and reports on the results of maintenance and repair activities by the SafeTrack crews.
Has the Project Sponsor identified safety and security critical tests to be performed prior to passenger operations?	Y	WMATA runs a test train through the area. ATC uses ATC 1000, Track and Structures uses WMATA 1000 and WMATA 2000, and POWR uses SMNT POWR.
Has the Project Sponsor verified conformance with safety and security requirements during testing, inspection and start-up phases?	Y	The various departments working on SafeTrack under the Rail Services Group are responsible for verification. QICO verifies this.

Has the Project Sponsor evaluated change orders, design waivers, or test variances for potential hazards and /or vulnerabilities?	N/A	Work is being conducted by WMATA or under direct WMATA supervision. There are no change orders or waivers. SAFE has the responsibility for hazard					
Has the Project Sponsor ensured the performance of safety and security analyses for proposed workarounds?	Y	mitigation with SafeTrack work and ensures mitigation with WMATA's MSRPH and RWPM.					
Has the Project Sponsor demonstrated through meetings or other methods, the integration of safety and security in the following: • Activation Plan and Procedures • Integrated Test Plan and Procedures • Operations and Maintenance Plan • Emergency Operations Plan?	N/A	SafeTrack is a maintenance activity. All work is being conducted with existing standards/procedures. Plans listed with this element are associated with new starts and system extensions.					
Has the Project Sponsor issued final safety and security certification?	N/A	Safety and Security Certification is not done with this work. SafeTrack is a maintenance activity. All work is being conducted with existing standards/ procedures. No new designs have been introduced and there are no system modifications.					
Has the Project Sponsor issued the final safety and security verification report?	N/A	Safety and Security Certification is not done with this work. SafeTrack is a maintenance activity. All work is being conducted with existing standards/procedures. No new designs have been introduced and there are no system modifications.					
Construction Safety							
Does the Project Sponsor have a documented/implemented Contractor Safety Program with which it expects contractors to comply?	Y	WMATA "Construction Safety and Environmental Manual" provides guidelines for WMATA construction, maintenance, and rehabilitation projects. Contractors are required to submit individual plans.					
Do the Project Sponsor's contractor(s) have a documented company-wide safety and security program plan?	Open	Check G.W. Peoples, Crane Masters, and Crane Services Company, Inc. The PMOC is in the process of evaluating this.					
Do the Project Sponsor's contractor(s) have a site- specific safety and security program plan?	Open	PMOC in coordination with and input from FWSO will determine this.					
Provide the Project Sponsor's OSHA statistics compared to the national average for the same type of work	Open	All SafeTrack Contracts WMATA National Average WMATA PMOC Verifying PMOC Verifying					
of work. If the comparison is not favorable, what actions are being taken by the Project Sponsor to improve its safety record?	Open	PMOC Verifying PMOC Verifying PMOC coordination with and input from FWSO will determine this.					

Does the Project Sponsor conduct site audits of the contractor's performance versus required safety/security procedures?	Y	WMATA's QICO group monitors work quality and site safety and performs QC inspection consistent with Section 9 of the SafeTrack PMP.
Federal Railroad Administration		
If shared track: has Project Sponsor submitted its waiver request application to FRA? (Please identify specific regulations for which waivers are being requested) If shared corridor: has Project Sponsor specified specific measures to address shared corridor safety concerns? Is the Collision Hazard Analysis underway? Other FRA required Hazard Analysis – Fencing, etc.? Does the project have Quiet Zones? Does FRA attend the Quarterly Review Meetings?	N/A	No shared track. This is a heavy rail transit project. There is no FRA involvement.

APPENDIX G - ACTION ITEMS - SAFETRACK PROGRAM

2	2 4	Develop Revision 1 of the						
	-	SafeTrack PMP using comments and guidance from PMOC.	No plan was developed before this project began.	Y	N	N	FTA & PMOC have been working together to develop a comprehensive PMP. The December 5, 2016 teleconference resolved issues and has advanced the development of the PMP. It is expected to be issued and approved by the end of February 2017.	R
2 2B	ı	Develop a procedure or standard for receipt inspection of materials to be used in railway maintenance.	Receipt inspection is being done differently by different maintenance departments. Quality inspections exist only for RR ties.	Y	Y	N	WMATA's AGM Rail has assigned an individual as Chief, Materials and Inventory Planning (MIPN) group. MIPN was created to centralize all of RAIL's procurement and materials logistic activities and brings a greater emphasis on material planning and compliance. MIPN is in the process of developing procedures to improve material ordering, receipt, inspection and handling, estimated to be complete 3Q17.	R

ITEM KEY

Subtask 2A CLIN 0002A – PMP Review Subtask 2B CLIN 0002B – On-Site Monitoring

LEGEND

PRIORITY (PR) PROJECT SPONSOR ACTION PMO CONTRACTOR STATUS

1- Most Critical D – Remedial Action Developed R – Review On-going

2- Critical A – Remedial Action Approved C – Completed – No further review required

3- Least Critical I – Action Implemented

Note – Items marked with a 'C' in the 'PMO Contractor Status' column will be dropped from future reports.

APPENDIX H – SUMMARY SAFETRACK SCHEDULE

Surge	Start	Finish	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Surge 1 — Ballston - East Falls Church	4-Jun-16	16-Jun-16						$\bot\bot\bot\bot$							
Surge 2 — Eastern Market - Benning Rd & Minn. Ave	18-Jun-16	3-Jul-16								$\coprod oldsymbol{f L}$					
Surge 3 — Natl. Airport - Braddock Rd	5-Jul-16	11-Jul-16								$\coprod oxday$					
Surge 4 — Natl. Airport-Crystal City-Pentagon City	12-Jul-16	18-Jul-16												Ш	
Surge 5 — Ballston - East Falls Church	20-Jul-16	31-Jul-16													
Surge 6 — Takoma - Silver Spring	1-Aug-16	7-Aug-16													
Surge 7 — Shady Grove - Twinbrook	9-Aug-16	21-Aug-16								¥_					
Surge 8 — Franconia-Springfield - Van Dorn St	27-Aug-16	11-Sep-16								ion Week					
Surge 9 — Vienna - West Falls Church	15-Sep-16	26-Oct-16								uguratic					
Surge 10 — NoMa - Fort Totten	29-Oct-16	22-Nov-16								luar					
Surge 11 — East Falls Church - Vienna	28-Nov-16	20-Dec-16													
Surge 12 — Rosslyn - Pentagon	11-Feb-17	28-Feb-17													
Surge 13 — Braddock Rd - Huntington/Van Dorn St	4-Mar-17	9-Apr-17													
Surge 14 — Greenbelt - College Park	April-May	(Dates TBD)													
Surge 15 — Minnesota Avenue - New Carrollton	May-Jun	(Dates TBD)								$\coprod oxed{L}$					
Cherry Blossom Festival	20-Mar-17	17-Apr-17													
Surge 16 — Shady Grove - Twinbrook	June (D	ates TBD)													

Dates shown in italics are planned. All other dates are actual.