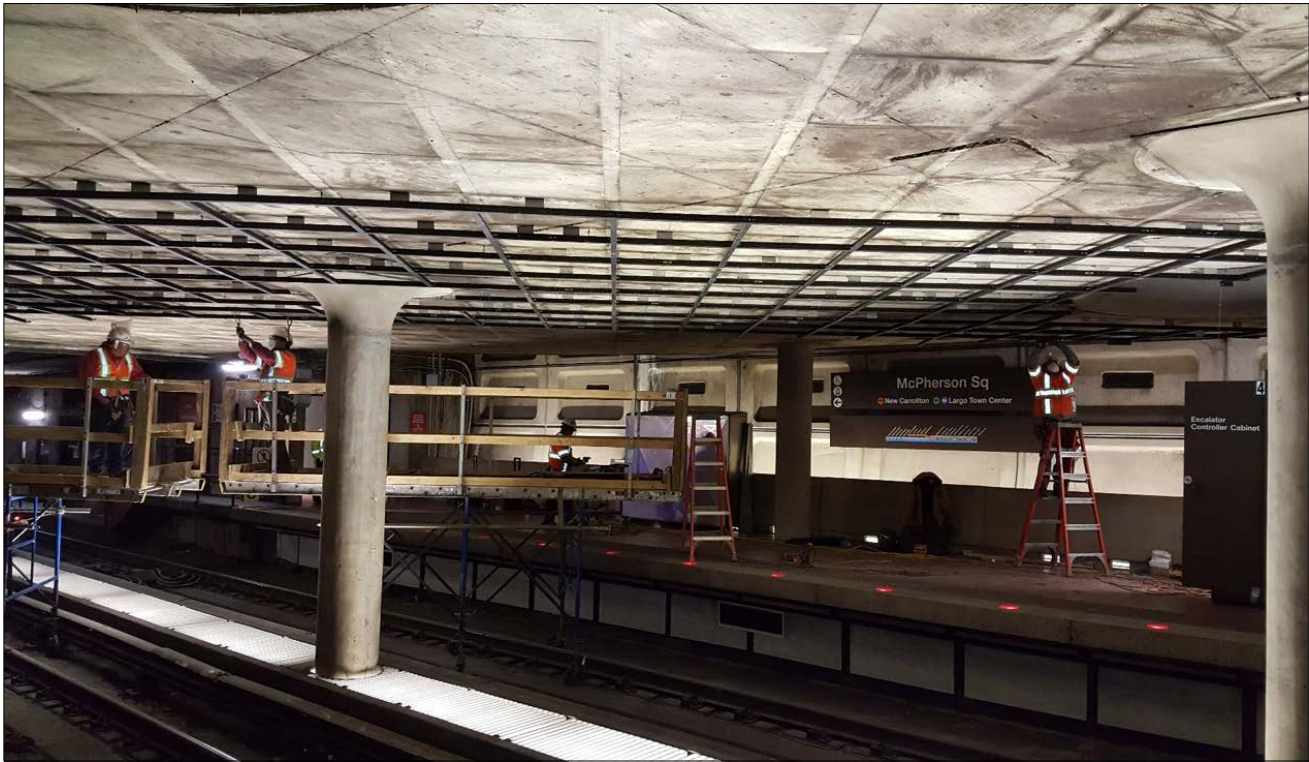


Monthly Report
SafeTrack Program
Washington Metropolitan Area Transit Authority (WMATA)

FOIA Exemptions: All (b) (6)

February 2017 Progress



Installation of ceiling tile grid at McPherson Square Station. An example of the cooperative work arrangement that allows different projects to take advantage of shut downs required for SafeTrack work. Date: February 4, 2017.

Submitted April 27, 2017

PMOC Contract Number: DTFT60-14-D-00011

Task Order Number: 006, Project Number: DC-27-5272, Work Order No. 01

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. [REDACTED]

Length of Time PMOC Assigned to Project under current Contract: 2 years, 8 months

Length of Time PMOC Lead Assigned to Project: 5 Years

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EXECUTIVE SUMMARY

Note: Italics in this report denotes a change from the previous report.

This *seventh* monthly PMOC report for SafeTrack is based on information provided by WMATA at the oversight meeting held on *March 21, 2017*, and subsequent weekly updates. The PMOC concurs with WMATA's assessment of progress in *February 2017 as stated* in its monthly report: ¹

"In February SafeTrack completed the last two weeks of non-surge work and returned to surging with Surge 12, a line segment shutdown of the Blue line between Rosslyn and Pentagon stations. Surge 12 was also modified to include weekend single tracking on the Yellow Line from Pentagon City to L'Enfant Plaza to enable the OBI project to advance their ceiling tile replacement work at Pentagon station. Surge 12 [started on February 11, 2017 and] concluded on February 28, 2017, with all planned tasks completed. The main focus of Surge 12 was to demolish, form and pour new grout pads, as well as replace fasteners and deteriorating old rail on both sets of tracks in this area. In 18 days, crews replaced more than 7,877 linear feet of grout pads, the most of any surge. Faster-moving grout pad work also enabled crews to replace 5,631 fasteners, more than any surge to date, and more than 5,200 linear feet of rail in this area.

In addition to the physical work completed, significant planning work was accomplished to prepare for Surge 13: Single Tracking Braddock Road to Van Dorn St/Huntington. Comments on Revision 1 of Project Management Plan (PMP) were received February 7 and Revision 2 of the PMP was submitted on February 21. There were some minor comments and Revision 3 and 4 of the PMP were submitted on February 24 and 27, respectively."

Here is a summary of PMOC the oversight activities for *February 2017*:

- *February 02 – PMOC completed its review and submitted comments on PMP Rev 1*
- *February 14 – Conducted the monthly SafeTrack oversight meeting*
- *February 22 – PMOC completed its review and submitted comments on PMP Rev 2*
- *February 27 – Completed review and submitted comments on SafeTrack PMP Rev 3*
- *February 28 – PMOC completed and submitted SafeTrack report of November activity*

A. Program Description

WMATA has indicated during the PMOC meetings that SafeTrack "addresses FTA and *National Transportation Safety Board (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 capital rehabilitation programs, after SafeTrack ends in mid-2017. The plan includes 15 "Safety

¹ WMATA's February 2017 SafeTrack Report to the PMOC dated March 17, 2017, page 1.

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 (CIP) 0024, Track Rehabilitation. Additional CIPs fund other related work during the SafeTrack surges. Federal funding sources include Passenger Rail Investment Improvement Act (PRIIA), §5307 Urbanized Area Formula, and §5337 State of Good Repair Formula. The SafeTrack Project started on June 4, 2016; the present scope is scheduled to be completed in June 2017.

B. Program Status

With the completion of Surge 12, SafeTrack crews continued making improvements to bring the Metrorail System to a state of good repair. The 18 days of Surge 12 addressed infrastructure issues on the Blue Line from Rosslyn Station (C05) to Pentagon Station (C07). SafeTrack crews and their contractor partners working 234 days have brought 46.5 miles of track to a state of good repair. (The table on page 8 of this report shows the days worked by surge.) SafeTrack Program work accomplished through the end of Surge 12 includes:

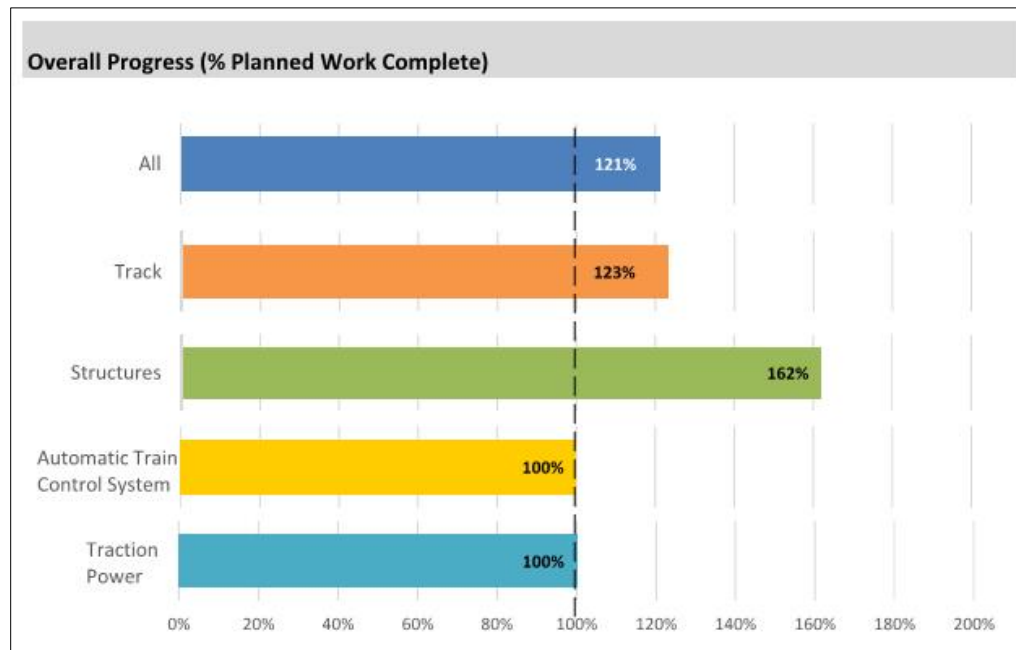
- Replaced 29,006 crossties
- Replaced 5,489 insulators
- Replaced 25,315 fasteners
- Replaced 53,974 linear feet of rail
- Welded 533 rail joints
- Installed 20,491 feet of new grout pads
- Repaired/replaced 1,798 tunnel lights
- Repaired/replaced 938 power cables
- Replaced 22,744 feet third rail cover board
- Cleaned 108,996 linear feet of track bed
- Refurbished/replaced 2,631 IDW boxes
- Converted 80 wayside signals to use LEDs
- Repaired 73 emergency trip stations

February 2017 Activity

- *Surge 12 concluded on February 28, 2017 with all planned tasks completed. During the surge, priority was given to repairing or replacing critical rail infrastructure that affects safety, train speeds and ride quality. Additional preventive maintenance activities were integrated and completed as time permitted. Overall, Surge 12 completed 121% of the work that was planned. The following list captures the overall progress of Surge 12.*
 - *Replaced 900 insulators*
 - *Welded more than 50 joints*
 - *Replaced almost 700 crossties*
 - *Replaced more than 5,600 fasteners*
 - *Replaced more than 5,200 linear feet of rail*
 - *Replaced more than 7,800 linear feet of grout pad*
 - *Repaired and/or replaced over 436 tunnel lighting fixtures*
 - *Repaired more than 35 power cables and more than 72 pigtails*

² From WMATA’s SafeTrack Project Management Plan, Revision Zero, dated October 30, 2016.

The following chart shows the percentages of Surge 12 planned work completed. The green bar in the chart below titled “Structures” reflects the grout pad repair work.



PMP Development – During February 2017, the PMP advanced through Revision 4. Following the February 15, 2017 meeting (mentioned in last month’s report), the PMOC received Revision 2 on February 21, 2017, and provided comments to SafeTrack the next day. On February 24, 2017, the PMOC received Revision 3 of the PMP for review, and provided comments to SafeTrack and FTA on February 27, 2017. Later that same day, the SafeTrack team submitted Revision 4 of the PMP to the PMOC and FTA. On February 28, 2017, FTA’s WMATA Safety Oversight Office (FWSO) and the PMOC submitted comments on Revision 4 of the PMP to FTA. A decision on approval by FTA is pending.

C. Core Accountability Information

1. Cost³

Cost – Current SafeTrack Budget (as of February 28, 2017)

Approved FY16-FY17 budget for SafeTrack:	\$133,226,892
Current Budget (See explanation for increase in next paragraph below):	\$134,234,515
Amount Expended:	\$108,560,640
Percent expended:	81%

This month, the cost data shows 81% expenditure of the budget. The current budget was increased by \$1,007,623 during February 2017 to cover force account costs. Despite the

³ FFY = Federal Fiscal Year, October 1 through September 30
FY = WMATA Fiscal Year, July 1 through June 30

increased budget, and considering that 12 of the 16 planned surges (75%) plus 31 days of non-surge track rehabilitation have been completed, the budget will have to be increased to accomplish the full scope of SafeTrack. The February 2017 SafeTrack report contained no more information than was in the January 2017 SafeTrack report on increasing the budget: “As of January [2017], it is estimated that the SafeTrack program will exceed the current budgeted ceiling and is under review. The SafeTrack team is actively working with WMATA’s Office of Management and Budget Services (OMBS) to identify available funding and additional funding requirements.” The PMOC will follow up on this issue at the April 18, 2017 monthly oversight meeting.

Cost – Latest available forecast for SafeTrack (as of February 28, 2017)

Estimated total cost for SafeTrack (Surges 1 thru 16 + non-surge work):	\$ 130,891,821
Contingency (See contingency table next page)	\$3,342,694
Projected CIP0024 total cost during SafeTrack:	\$ 134,234,515

A budget forecast update will be reflected in the March 2017 progress report.

Cost – Summary of Funding for SafeTrack

Federal Fiscal Year	Funding Source	Amount
FFY15*	PRIIA	\$18,722,282
FFY15	PRIIA	\$18,521,477
FFY16	PRIIA	\$45,947,000
FFY16	\$5337	\$10,000,000
FFY16	\$5307	\$10,000,000
Subtotal	Federal Funding	\$103,190,759
	Short-term borrowing**	\$ 31,043,756
Grand Total	All Sources	\$134,234,515

*Funds provided from WMATA’s FY16 budget to support the first month of SafeTrack.

**WMATA added \$1,007,623 to the project in February 2017.

2. Schedule

- Original SafeTrack project completion date: June 2017
- Current forecast completion date: June 2017. See Appendix I for a detailed schedule.
- Project Duration: June 4, 2016 through June 30, 2017, 392 days
- Calendar days expended: June 4, 2016 through February 28, 2017, 270 days
- Percent of time expended: 69%

3. Contingency

- It is important to understand that the SafeTrack Program views contingency differently than how WMATA views contingency for one of its capital construction projects.

According to the SafeTrack PMP: ⁴

“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 – *The following table summarizes the use of contingency since the new SafeTrack budget was established in November 2016.*

As-of Date	Amount Expended	Remaining Contingency
November 30, 2016	- - -	\$17,661,436
December 31, 2016	\$7,201,324	\$10,460,112
January 31, 2017	\$5,683,374	\$ 4,776,738
February 28, 2017	\$1,434,044	\$ 3,342,694

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. Ability to segregate SafeTrack surge expenses from other concurrent maintenance expenses.

In its March 2017 report of February 2017 progress, the SafeTrack team continued to report on its activities to assure time was correctly being charged. The report notes that SafeTrack conducted checks of timecards to validate labor charges did not exceed 14 hours per day as required by the fatigue management policy. The report further stated, “The manager was informed for personnel exceeding 14 hours per day and confirmed that the work was assigned in accordance with the Collective Bargaining Agreement.”⁵

*SafeTrack stated in an email to the PMOC that accounts are established to capture other than SafeTrack Program costs, which are captured under CIP0024. Specifically, “Capital Improvement Project (CIP) 0024.01 is reserved for maintenance areas that are outside the current surge. Other concurrent track maintenance work outside CIP0024 is billed to a general operating budget or other CIP budgets where applicable.” This issue is **CLOSED**.*

- b. Tracking and Completion of Punch List Work

⁴ SafeTrack PMP, Revision 3, February 24, 2017, page 10.

⁵ WMATA’s February 2017 SafeTrack Report, page 4.

*The SafeTrack team reported at the March 21, 2017 oversight meeting on February 2017 progress of the SafeTrack Program that there will be no punch list for the non-surge work performed in January and February 2017. Moreover, WMATA's Department of Track and Structures (TRST) committed to clean up all "open" items found by WMATA's Department of Quality and Internal Compliance Operations (QICO) within 15 days of the end of the non-surge work period. Regarding Surge 12, QICO performed its closeout walkthrough on February 28, 2017. Of the 23 items identified during the period of Surge 12, the two high and four medium priority items were closed, and 13 low priority items remain open. These 13 items are to be addressed by WMATA's Rail Services Department. This issue will remain **OPEN** through the end of the SafeTrack program, and the PMOC will continue to review and report on WMATA's management of its punchlist.*

c. Project Management Plan

*The PMOC received, reviewed, and submitted comments to FTA on Revision 4 of the PMP on February 27, 2017. This issue remains **OPEN**.*

d. Safety

*In February 2017 during Surge 12, the SafeTrack Program experienced no recordable injuries. A recordable injury is defined as an injury where the individual received medical care greater than first aid); however, there were two accidents requiring first aid. This issue will remain **OPEN** through the completion of the SafeTrack Program and the PMOC will continue to review and report on WMATA's management of its punchlist.*

e. Grout for Grout Pads

*This issue is the absence of field testing of grout for new grout pads. As of January 31, 2017, a "full grout pad testing program" had not been established. On February 17, 2017, the PMOC forwarded to the Director of SafeTrack several questions about the use of new grout for grout pads. Then, on February 27, 2017, the PMOC again wrote the Director of the SafeTrack program asking for an update on the progress WMATA is making developing a grout testing procedure. In a subsequent oral communication, the SafeTrack program director informed that a draft procedure was circulating in the Maintenance of Way Engineering (MWOE) group for comment. This issue remains **OPEN**.*

2. **New Problems/Issues**

f. Project Funding

*The SafeTrack team recognizes that additional funds will be needed to complete all planned SafeTrack work and has reviewed this issue with OMBS. This issue was discussed at the March 21, 2017 oversight meeting. No new information was available at the March 21, 2017 meeting; however, the SafeTrack team stated that revised budget information should be available at the April 18, 2017 meeting. The PMOC expects to present that information in next month's SafeTrack progress report. This issue remains **OPEN**.*

g. Personal Protective Equipment (PPE)

The March 2017 SafeTrack report of February 2017 progress contained a chart on page one showing compliance with the requirement for workers to use PPE. There was less than 100% compliance for use of hard hats, footwear, and safety glasses. When asked about

*this, SafeTrack team explained that WMATA's Department of Safety and Environmental Management (SAFE) collects this data and that the SafeTrack team is constantly striving for 100% compliance. The PMOC will continue to monitor PPE compliance. This issue remains **OPEN**.*

MAIN REPORT

1. Program Status

The following table summarizes the status of the SafeTrack Program through Surge 12 as of *February 28, 2017*, based on reports submitted by WMATA.

SURGE No.	FROM – TO	TYPE	DAYS SURGING	APPROXIMATE TOTAL MILES		OVERALL % COMPLETE
				TRK 1	TRK 2	
1	East Falls Church to Ballston	Single Tracking	13	2.4	0	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	0	2.4	108%
6	Single Spring to Takoma	Single Tracking	7	1.1	0	105%
7	Shady Grove to Twin Brook	Single Tracking & Wknd Shutdown	12	4.4	0	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%
<i>Non-surge period</i>	Red Line Van Ness-UDC to Grosvenor-Strathmore	Single Tracking	31	2.1	2.1	<i>Note 2</i>
	Orange/Blue/Silver Line from Rosslyn to Eastern Market	Single Tracking & Shutdown		0.9	0.9	<i>Note 2</i>
12	Blue Line - Rosslyn to Pentagon	Complete Shutdown	18	2.4	2.4	121%
13	Yellow/Blue Line Braddock Rd to Huntington & Van Dorn					
14	Green Line Greenbelt to College Park					
15	Orange Line Minnesota Ave to New Carrollton					
16	Red Line Shady Grove to Twinbrook					
	Totals to Date		234	29.0	23.5	110% ¹

Note 1: Average percentage of the 12 surges on which WMATA has reported.

Note 2: Non-surge period overall percent complete was not reported.

The table in Appendix C provides details of the work completed during the 12 surges and the non-surge period.

Surge 12 Work Completed in February 2017

Prior to the start of Surge 12, QICO conducted a pre-surge inspection of the Surge 12 work zone on Thursday, February 2, 2017. The results of the pre-surge inspection were summarized in QICO's Pre-Surge 12 report:⁶

"In comparison to previous SafeTrack surges, QICO noted fewer occurrences of safety-critical items with regards to the track structure. This is understandable given the fact that the track between C07-C05 [Pentagon and Rosslyn Stations] experiences the lowest annual tonnage in the Metrorail system (11 MGT based upon 6-car trains, AW-2 loading, present frequency). However, the route contains some of the oldest track components in the system (commissioned in 1977). As a result, the ballasted section of track has experienced timber tie degradation and is in need of maintenance (particularly Track C2) [outbound]. Direct fixation fastener replacement has been conducted previously in several key locations (on the high rails in some curves), but fasteners throughout the Surge 12 working limits are reaching the end of their predicted lifespan (Hixon H-12, Landis, and LB Foster F-17 fasteners); note that there is a cluster of previously observed fastener defects on Track C1 between Chain Markers 140+00 and 170+00. In addition, Hixon H-12 fasteners installed during the original construction of this section of track have been previously identified to have inadequate design for lateral forces and should be removed. Finally, QICO recommends several other concerns be attended to, including platform maintenance at Arlington Cemetery Station (C06), replacing deteriorated ATC marker coils, and improving the poor state of tunnel lighting on Track C2 near Pentagon Station (C07)."

Surge 12 resulted in an around-the-clock shutdown of the tracks on the Blue line between Rosslyn (C05) and Pentagon (C07) stations and weekend single tracking on the Yellow line from Pentagon City (C08) to L'Enfant Plaza (F03). (See mini-map.)

Surge 12 began on February 11, 2017 and concluded on February 28, 2017. During the 18-day surge, all planned tasks were completed. The priority of work on Surge 12 was critical rail infrastructure that affects safety, train speed, and quality of ride. In addition to SafeTrack work, other crews took advantage of the shutdown to perform maintenance work. Planning of future work by the SafeTrack team will include, where possible, integration of additional preventive maintenance activities. In its report on Surge 12, the SafeTrack team reported:⁷

Surge 12 Work Areas – C and L Lines



⁶ QICO's "Quality Pre-Surge Report, SafeTrack Surge 12, February 7, 2017, page 1.

⁷ WMATA's February 2017 SafeTrack Report, page 4.

“The main focus of the surge was to demolish, form and pour new grout pads, as well as replace fasteners and deteriorating old rail on both sets of tracks in this area. In eighteen days, crews replaced over 7,877 linear feet of grout pads, the most of any surge to date. With a more efficient and effective method developed during SafeTrack, WMATA has been able to replace 20,491 linear feet of group pads in nine months. Under previous maintenance access, this would have taken almost 2.5 years to accomplish. Faster-moving grout pad work also enabled crews to replace 5,631 fasteners, more than any surge to date, and over 5,200 linear feet of rail in this area.

Crews were able to string in 1,170 linear feet long continuous sections, which are three times longer than the typical 390 linear feet installed, by leveraging the grade crossing location near Arlington Cemetery to weld longer pieces of rail, enabling significant increase in rail that could be replaced. (See adjacent photo.) Longer sections of continuously welded rail improves ride quality and decreases work required to maintain mechanical (bolted) joints.”



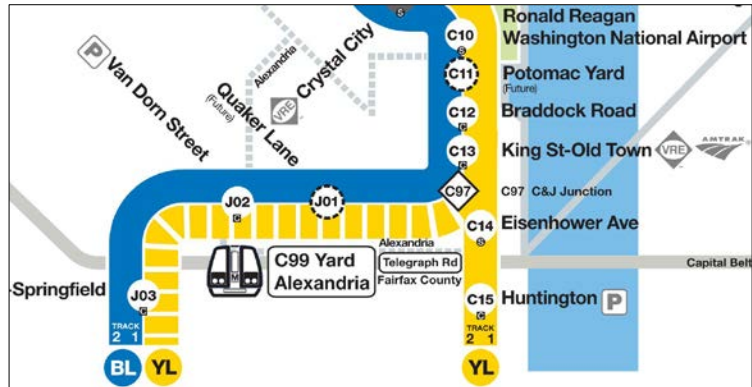
SafeTrack Accomplishments during Surge 12⁸

	Task	unit	Completed During Surge
Track	Crosstie renewal	# crossties	695
	Insulator replacement	# insulators	900
	Ballast renewal	# tons	300
	Tamping	# linear feet	10,480
	Fastner renewal	# fastners	5,631
	Joint elimination	# joints welded	51
	Rail replacement	# linear feet	5,265
Structures	Grout Pad renewal	# linear feet grout pad	7,877
Automatic Train Control System	Signal conversion to LED lighting	# signals	4
	Track Junction box repair/replacement	# boxes	1
Traction Power System	Emergency Trip Station Repair	# units	29
	Tunnel Light repair/relamp	# units	436
	Power Cable repair/replacement	# cables	35

⁸ WMATA’s February 2017 SafeTrack Report, page 7.

Work Planned for March 2017

During February 2017, the SafeTrack Team, in addition to executing Surge 12, was fully engaged planning for Surge 13. Surge 13 has two parts. 13.1 & 13.2. 13.1 is scheduled to begin on March 4 and end 29 days later on April 9, 2017. 13.1 will be continuous single tracking from Braddock Road Station (C12) to Huntington Station (C15) on the Yellow Line and from Braddock Road Station to Van Dorn Street Station (J02) on the Blue Line. 13.2, scheduled to begin on April 9, 2017, is also a continuous single tracking from King Street Station (C13) to Huntington Station. The SafeTrack Team described its planning for Surge 13 in its February 2017 report.⁹



“In addition to daily coordination calls and weekly coordination meeting to address current and upcoming non-surge work, SafeTrack and Mobile Command developed work area maps for Surge 13. Surge 13 covers a large area and has a significant impact on service as it results in 75% or greater service reductions for the area south of Braddock Road.

Surge 13, C12-Braddock Rd to C15-Huntington and J02-Van Dorn: Work on these portions of the C-Line and the J-Line will include tie replacement, fastener replacement and renewal, grout pad replacement and renewal, remove mud and debris, fix leaks, replace and weld rail and replace the C98 interlocking. Layout for Surge 13 will complete and Surge 13 will begin on March 4 and end on April 9, 2017 (37-days).”

WMATA projected the following not-later-than (NLT) dates in planning for future surges. Surge 14 activities are in bold. Dates for Surges 15 and 16 have not been published. Activities are sorted in chronological order.

Surge	Surge 13 & 14 Planning Activities	NLT Dates
13	QICO Pre-Surge Report	1 Mar 17
13	Develop Plan for work zone and employee parking	3 Mar 17
13	Final Work Plan and Surge Scope (March Chart) developed by	3 Mar 17
13	Issue Coordinated Work Plan (MCC)	3 Mar 17
13	Begin Surge	4 Mar 17
14	TRST Execution Plan (March Chart) developed by	31 Mar 17
14	Develop Plan for work zone and employee parking	31 Mar 17

⁹ WMATA’s February 2017 SafeTrack Report, page 7.

Surge	Surge 13 & 14 Planning Activities	NLT Dates
14	QICO Pre-Surge Report	7 Apr 17
14	Final Work Plan and Surge Scope (March Chart) developed	7 Apr 17
13	End Surge	9 Apr 17
14	Begin Surge	15 Apr 17
13	Post Surge TGV Run	20 Apr 17
13	QICO Close Out Report	4 May 17

2. Program Cost

- The SafeTrack budget status as of *February 28, 2017*, is reflected in the following table.

SafeTrack Program as of February 28, 2017

Preliminary Estimated Budget	Approved SafeTrack FY16-FY17 Budget	Expenditures Thru <i>February 28, 2017</i>	Percent of Budget Expended
\$118, 797,984	<i>\$134,234,515*</i>	<i>\$ 108,560,640</i>	<i>81%</i>
Discussion of Variances	There are no variances.		
Discussion of Funding sources	Funding for SafeTrack is from PRIIA, §5307 & §5337 formula funds, and short-term borrowing.		
Contingency as of <i>February 28, 2017</i>	<i>\$3,342,694</i>		
<i>*A reallocation of funding was done in early February 2017 to increase the budget for Safe Track. The funds were moved into the Force Account Activity Line to preclude the project from overrunning this budget line.</i>			

- Budget Analysis by PMOC**
 - Cost data shows 81% of budget has been expended.
 - 75% or 12 of 16 planned surges are complete.
 - Estimated total work days for 16 surges plus 31 days non-surge work = 342 days
 - Total days worked for SafeTrack to date = 234.
 - 69% of the estimated total work days for SafeTrack have been used.
 - Considering 69% of the planned days and 81% of the budget consumed, SafeTrack will need additional funds to complete the SafeTrack program through June 2017.
 - Using the above statistics, *it is the PMOC's opinion* an additional \$24,431,000 will be required to complete the SafeTrack Program.
- Budget Analysis by SafeTrack Team**

In its monthly report for January 2017, the SafeTrack team concluded that, “[a]s of January [2017], it is estimated that the SafeTrack program will exceed the current budgeted ceiling; thus, the budget is under review. The SafeTrack Team is actively working with OMBS to identify available funding and additional funding requirements.”
- Contingency**

It is important to understand that the SafeTrack team views contingency differently than how WMATA staff view contingency for capital construction projects. According to the

SafeTrack PMP:¹⁰

“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 [reserve] as unallocated budget.”

WMATA’s accounting software reports “unallocated budget” or “project reserve” as contingency; therefore, this report will use contingency to represent unallocated budget.

The following table summarizes the use of contingency since the new SafeTrack budget was established in November 2016.

As-of Date	Amount Expended	Remaining Contingency
November 30, 2016	- - -	\$17,661,436
December 31, 2016	\$7,201,324	\$10,460,112
January 31, 2017	\$5,683,374	\$ 4,776,738
February 28, 2017	\$1,434,044	\$ 3,342,694

3. Program Schedule

For surges 1 through 12, the bar chart in Appendix I reflects actual dates the work was accomplished. The schedule also shows WMATA’s plan for Surge 13. The dates for Surges 14 through 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

There were no staffing changes during February 2017.

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

- *Post-Work Inspection of Non-Surge Activities – QICO performed a final inspection of non-surge work on the “C Line” (between Rosslyn and Stations) on February 28, 2017. The purpose of the inspection was to verify the status of discrepancies (open or closed) that QICO tracked in its Mini-Surge Asset Tracking Log from inspections conducted during the work event. Each item was assigned a priority (low, medium, high). The closeout track walk was performed on Tracks 1 and 2. A total of 24 items were tracked on the Mini-Surge Asset Tracking Log; and, of the 24 total items, nine remained open as of February 15, 2015. All nine items are of low priority.*

¹⁰ SafeTrack PMP, Revision 4, dated February 27, 2017, page 10.

- Pre-Surge Inspection for Surge 12 – Following inspection of the Surge 12 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 12 area on February 2, 2017. QICO’s inspection involved visual observation, physical measurements, notation of tolerances or dimensions, and photographs. According to SafeTrack’s February 2017 report: ¹¹

“QICO conducted an independent walking track inspection for upcoming SafeTrack Surge 12. Field observations were compared to WMATA’s defect and speed restriction history in Optram/Maximo, as well as scopes of work provided by maintenance groups. The completed inspection and the following analysis provide a robust second line of defense to ensure critical SafeTrack maintenance items are addressed and tracked to completion during the surge.”

QICO documented its pre-surge inspection findings in its “Quality Pre-Surge Report” dated February 7, 2017. (See Appendix F) Upon completion of the pre-surge inspection, QICO performs gap assessments between its observations and the maintenance departments’ scopes of work to determine the need for departments to modify scopes if they are found to be lacking 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.

- Inspection During Surge 12

The maintenance departments perform quality control inspections during the surge and QICO conducts daily visual quality assurance inspections. In addition, FWSO conducts independent safety observations of the surges. On February 16, 2017, the sixth day of Surge 12, FWSO met representatives from WMATA SAFE and TRST to conduct an observation of SafeTrack Surge 12. The FWSO inspector noted “no exceptions or defects.”

ATC Crew at C06 Interlocking (2/16/17)



*FWSO performed another inspection of Surge 12 on February 21, 2017, the 11th day of the Surge. The inspector noted in his report:*¹²

“FWSO personnel received a Job Safety Briefing from the Surge 12 briefing table. All personal protective equipment (PPE) and roadway worker protection (RWP) ID were checked, and the working limits were reviewed.

¹¹ WMATA’s February 2017 SafeTrack Report, page 8.

¹² FWSO Inspection Report No. 20170221-WMATA-WP-1, dated February 21, 2017, page 1.

The briefer covered the locations and types of work taking place as well as the nearest hospital and safety rule of the day. FWSO personnel were provided a yellow bracelet indicating their receipt of the briefing and were granted access to the roadway. No exceptions were taken.”

During the February 21, 2017 inspection, FWSO inspectors observed grout pad removal and replacement in Blue Line tunnel areas between Rosslyn and Pentagon Stations. According to the Inspection report:¹³

“FWSO inspectors observed low lighting levels inside the tunnel areas where work was taking place as well as the presence of water and poor drainage. WMATA should ensure that sufficient lighting and a dry work environment is provided to work crews prior to surge work. FWSO observed multiple bulbs burnt out and dirty lenses, which reduced the amount of light required. FWSO noted OSHA standard 1926.56(a) as a good reference; it requires a minimum of 5 foot-candles in a tunnel construction area.”

- 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 in the Surge Tracking Log. *The final observations reference the Pre-Surge Report. QICO conducted the Closeout Walkthrough for the “C” Line of Surge 12, Tracks 1 and 2, on February 28, 2017.*

Post-Surge Reports – *The Closeout Report for Surge 12 summarized QICO’s findings on page 6 of that report:¹⁴*

“Throughout the surge, each discrepancy found by QICO officers/inspectors relating to quality of work or safety was assigned a priority (low, medium, high) and tracked in the QICO Surge Asset Tracking Log. The closeout walk-through on 02/28/2017 was conducted to verify the status of these items (open or closed). The closeout track walk was performed on track C1 and C2. A total of 23 items were being tracked on the Surge Asset Tracking Log. Of the 23 total items, 13 remain open, and all 13 were low priority. (0 items listed as high and medium priorities were left open).”

The Closeout report also contained a sampling report of new crossties stockpiled in Alexandria Yard.¹⁵ According to its report, QICO sampled 4% of the approximately 740 ties stacked in the yard. It is the PMOC’s opinion that QICO’s sampling was thorough and professional. The report concluded that “[a]ll cross ties out of the sample set of 31 cross ties were deemed adequate according to WMATA’s standards.” QICO reported that crossties are inspected as they are received. “QICO noted that three timber ties were set aside. These timber ties were defective measured against the criteria above. This suggests that QC had been performed on lot previously.” The sampling portion of the Closeout

¹³ FWSO Inspection Report No. 20170221-WMATA-WP-1, dated February 21, 2017, page 2.

¹⁴ QICO Closeout Report, SafeTrack Surge 12, Rosslyn to Pentagon, March 29, 2017, page 6.

¹⁵ Closeout Report, page 5.

Report concluded that in the future, QICO “will perform a larger sampling as part of another First Article Inspection (FAI) of incoming timber ties before they are QC’d.”

The Closeout Report further addressed Maximo documentation in Section 4 of the Report. QICO’s review of Maximo work orders revealed that the “parent work order” for completed Surge 12 trackwork should be recoded.¹⁶

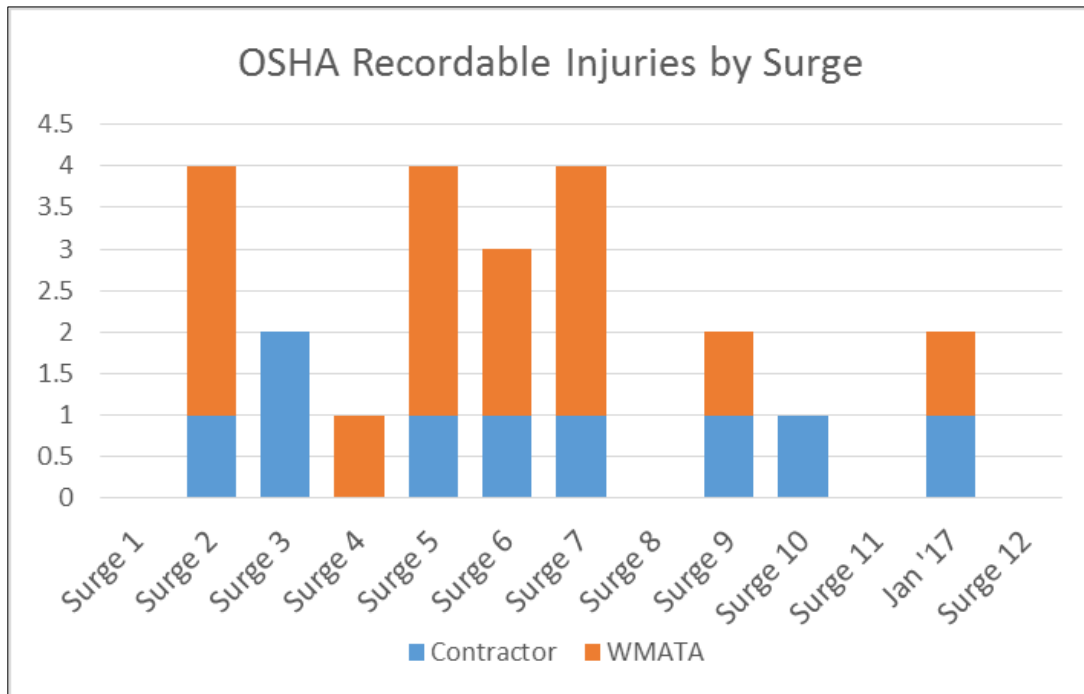
- *Project Audit – In a report prepared for the February 14, 2017 Quarterly Program Review Meeting, QICO presented its schedule of 2017 project audits. The SafeTrack Program is scheduled for an audit in the February – March 2017 time frame. QICO’s audit for SafeTrack will identify and assess the risks to non-compliance with FTA mandated Quality Management System Guidelines 2012 (FTA-PA-27-5194-12.1) and with the industry best practices on project management methodology per Project Management Book of Knowledge (PMBOK). The detailed Audit Report will be presented to the WMATA’s executive leadership team in the last week of May, 2017.*

7. Safety and Security

- Safety and security are addressed in WMATA’s procedures for performance of track work. The PMOC received this document, but has not begun to review it due to other work requirements. However, the PMOC and FWSO have reviewed available documents and completed the FTA’s Safety and Security Checklist shown in Appendix G of this report.
- As a part of its safety and security program, WMATA has developed an outreach program to keep the public apprised of the plans for each surge. As a part of that 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.
- *According to Revision 4 of the PMP, SAFE is actively engaged in SafeTrack by providing additional field personnel 24 hours a day, 7 days a week to support hazard mitigation for a safer work environment. In the surge work zones, the responsibilities and activities of SAFE Managers and Safety Officers are:*
 - *Monitor Work Zone Safety and compliance with Roadway Worker Protection Manual (RWPM) and Metrorail Safety Rules and Procedures Handbook (MSRPH)*
 - *Perform Rule Compliance Checks*
 - *Address Safety Concerns*
 - *Notify Maintenance Group supervisors/managers of safety concerns needing immediate resolution.*
 - *Verify correction of safety concerns*
 - *Investigate Incidents/Accidents*

¹⁶ Closeout Report, Section 4, page 5.

- Occupational Safety and Health Administration (OSHA) Recordable Injuries – The SafeTrack team tracks OSHA recordable injuries by surge. In February 2017, SafeTrack experienced *no* OSHA recordable injuries. A *recordable injury* is defined as an injury where the individual received medical care greater than first aid). SafeTrack’s history of OSHA recordable injuries is depicted in the following chart. It is noted that there were no recordable injuries during Surges 1, 8, 11, and 12.



- Non-Recordable Incidents – There were two accidents requiring first aid during Surge 12. One involved a WMATA employee injuring his foot when he stepped on a screw spike. The second involved a contractor employee who stepped on a nail. In each case, the worker was treated with first aid and transported to hospital for examination and a tetanus booster shot. According to the monthly SafeTrack report:¹⁷

“In both cases the injury reports were entered into the WMATA Safety Management System (SMS). Due to the similarity of the incidents, these accidents were discussed extensively within the Track and Structures Office. Following that discussion, it was decided that announcements will be made by the Safety Briefers at each Surge. In addition, changes will be made to the Structures work process to eliminate the hazard of such sharp objects (nails, screws, etc.) protruding from the formwork or being left in the area.”

- PPE Compliance – In addition to tracking recordable injuries, SafeTrack has been tracking worker compliance with requirements for wearing PPE. SafeTrack’s report of February

¹⁷ SafeTrack Monthly Update, pages 2 and 3.

2017 progress contained the following table on PPE compliance. The most persistent compliance issues are hard hats and safety glasses.

	Personal Protective Equipment Compliance					
		Hard Hats	Footwear	Reflective Shirt	Safety Glasses	Working Radio
2016	Sept	99%	100%	100%	89%	100%
	Oct	98%	100%	100%	96%	100%
	Nov	99%	100%	100%	98%	100%
	Dec	100%	100%	100%	100%	100%
2017	Jan	100%	100%	100%	100%	100%
	Feb	98%	96%	100%	96%	98%
	Mar					
	Apr					
	May					
	Jun					

8. Contract Administration

- Administration of third-party contracts related to SafeTrack is the responsibility of WMATA's maintenance departments. *SafeTrack has agreed to include in Revision 5 of its PMP a section describing how the maintenance departments administer contracts related to SafeTrack work.*
- Disadvantaged Business Enterprise (DBE) Participation – The SafeTrack report of February 2017 progress did not contain information on DBE participation. The PMOC will place this on the agenda for the April 18, 2017 oversight meeting. The following table, contains the information presented in the PMOC's report of SafeTrack's January 2017 progress.*

DBE Goals and Accomplishments as of January 31, 2017

Contract Number	Name of Prime Contractor	DBE Participation Goal	Goal Attainment as of 1/31/17
FQ13027A	Lewis Bolt	5.0%	100%
FQ13027C	Pandrol USA,LP	9.0%	100%
FQ14103	G.W. Peoples Contracting Co., Inc.*	DBE Prime	100%
FQ15083	Unitrac Railroad Materials	5.0%	100%
FQ16128	Stella -Jones Corporation	5.0%	79%
FQ17011	G.W. Peoples Contracting Co., Inc.*	DBE Prime	3%
FQ16119	Progress Rail Services	2.0%	89%
FQ12201	Davis Freight	5.5%	100%

9. Program Risk

- The SafeTrack team has published a two-page risk register in Revision 4 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 4 of the PMP. The PMOC has no comments on the risk register.

10. Action Items

- Action Items are shown in Appendix H of this report.

APPENDICES

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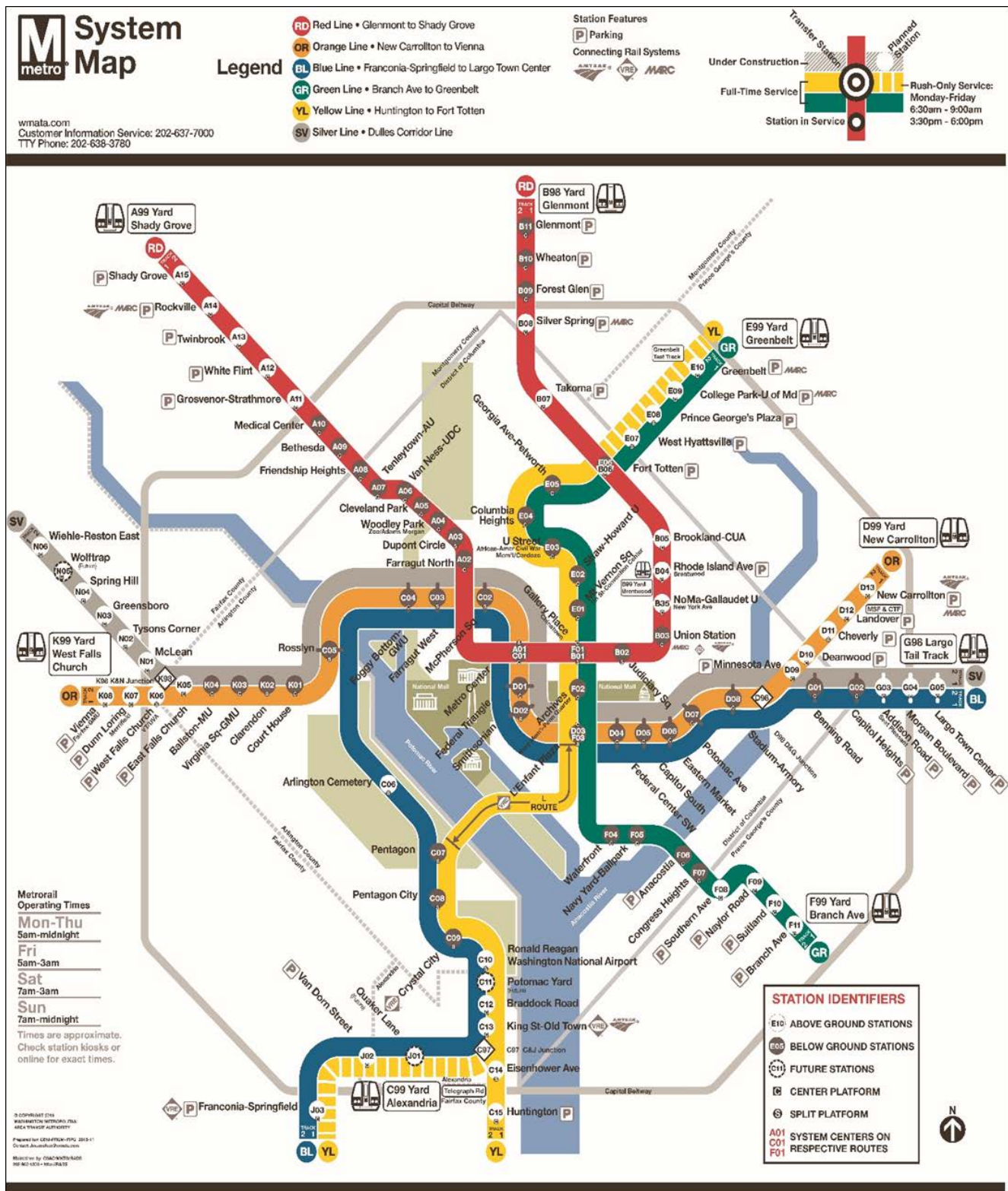
APPENDIX A – ACRONYMS AND ABBREVIATIONS

ADA	Americans with Disabilities Act
ATC	Automatic Train Control
ATO	Automatic Train Operation
BAFO	Best and Final Offer
BFMP	Bus Fleet Management Plan
BMNT	Office of Bus Maintenance
BMP	Best Management Practice for storm water (by Maryland Dept. of Environment)
BOM	Bill of Materials
BOMF	Bus Operations and Maintenance Facility
C-35A	WMATA Form for Work Authorization
CA	Conditional Acceptance
CCB	Car Control Building at New Carrollton Rail yard
CCTV	Closed Circuit Television
CENI	Chief Engineer Infrastructure
CIP	Capital Improvement Program
CMF	Car Maintenance Facility (a building in a rail yard)
CMB	Car Maintenance Building
CNG	Compressed Natural Gas
COUN	WMATA's Office of General Counsel
CPM	Critical Path Method (Schedule)
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
CWP	<i>Coordinated Work Plan</i>
D-B	Design-Builder
DAS	Distributed Antenna System
DBE	Disadvantaged Business Enterprise
DDOE	District of Columbia Department of the Environment
DEF	Diesel Exhaust Fluid
ENSS	WMATA Engineering Support Services
ETS	Emergency Trip Station
FA	Force Account
FACP	Force Account Capital Projects
FTA	Federal Transit Administration
FWSO	FTA's WMATA Safety Oversight Office
FY	Fiscal Year
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
JOC	Job Order Contract
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
M	Million
MAXIMO	WMATA's Enterprise Maintenance Management System
MCAP	Major Capital Project (as defined by WMATA)
MCX	Medical Center Crossover
MOW	Maintenance of Way, a personnel qualification by CSX
NCN	Non-conformance Notice
<i>NLT</i>	<i>Not-Later-Than</i>
NTP	Notice to Proceed
<i>NTSB</i>	<i>National Transportation Safety Board</i>
OMBS	WMATA's Office of Management and Budget Services
O&M	Operation and Maintenance
OFS	Order for Services
NOV	Notice of Violation
O/B 1	Orange/Blue Lines 1 Contract
<i>OSHA</i>	<i>Occupational Safety and Health Administration</i>
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
<i>PMBOK</i>	<i>Project Management Book of Knowledge</i>
PMOC	Project Management Oversight Consultant
PMP	Project Management Plan
PPE	Personal Protective Equipment
PPLE	Program, Planning and Energy
PRIIA	Passenger Rail Investment Improvement Act
PRMT	WMATA's Office of Procurement
QA	Quality Assurance
QAP	Quality Assurance Plan
QC	Quality Control
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
RWP	Roadway Worker Protection
SAFE	WMATA's Office of Safety
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
TBS	Tiebreaker Station
TCR	Train Control Room
TPSS	Traction Power Substation
TQIP	Track Quality Improvement Plan
TRST	WMATA's Department of Track and Structures
TSFA	Track Engineering
TSSM	Track and Structures – System Maintenance
WMATA	Washington Metropolitan Area Transit Authority

APPENDIX B – MAP OF WMATA's RAIL TRANSIT SYSTEM



APPENDIX C – SAFETRACK WORK COMPLETED TO DATE

As of February 28, 2017

Surge No.	Miles in Length ¹	Crosstie Renewal (each)	Insulator Renewal (each)	Fasteners Replaced (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
Note 2	4.2	0	0	3,261	12,129	42	0	212	0	0	0	0	0	0
Note 3	1.8	0	49	4,954	1,560	47	3,113	218	Note 4	32	0	5	0	12
12	4.8	695	900	5,631	5,265	51	7,877	436	35	0	0	4	0	29
13														
14														
15														
Totals	52.5	29,006	5,489	25,315	53,974	533	20,491	1,798	938	22,744	2,631	80	108,996	73

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.

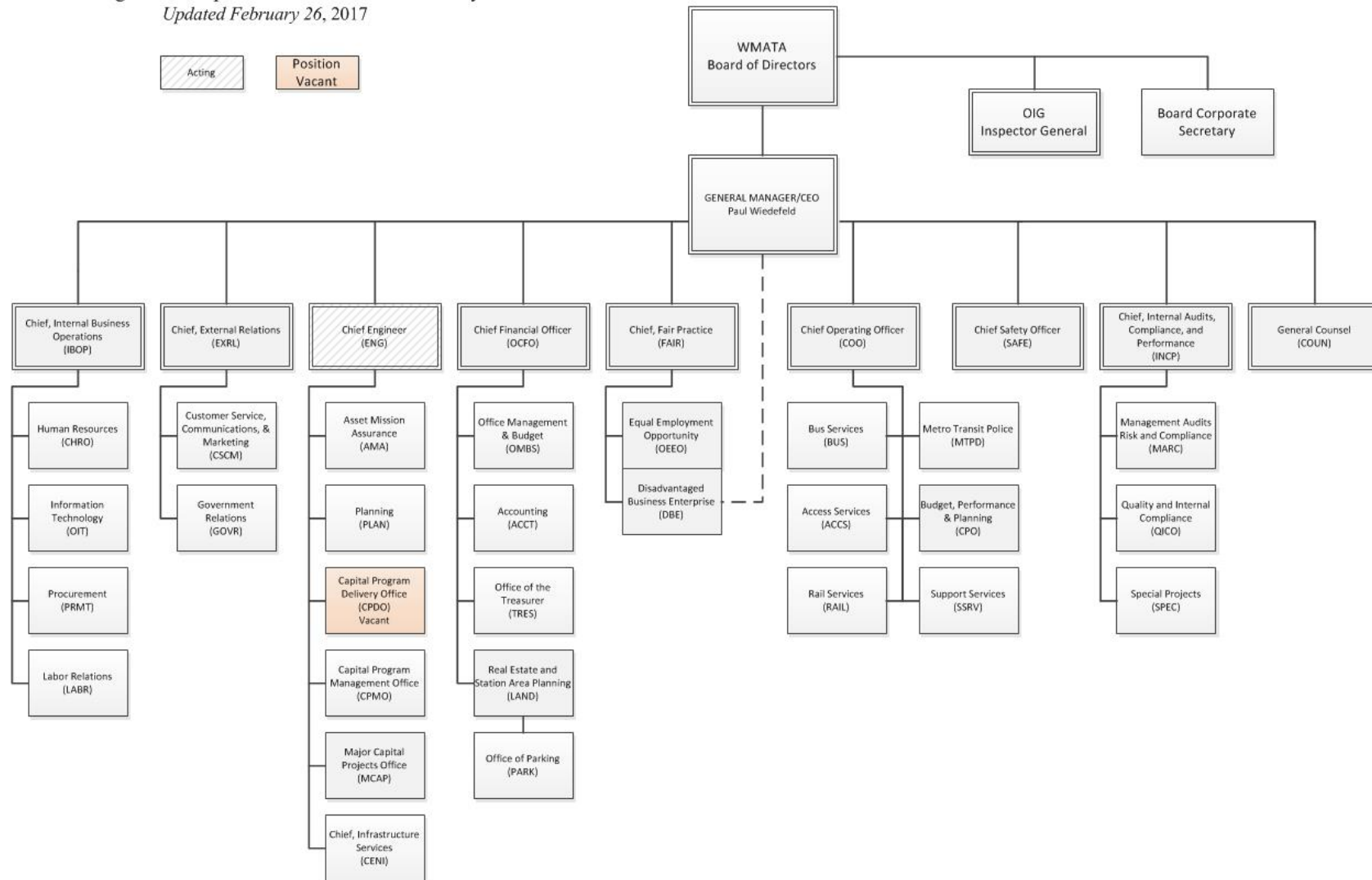
Note 2: Non-surge work on the A Line reported in WMATA's January SafeTrack report, page 9.

Note 3: Non-surge work on the C & D Lines reported in WMATA's January SafeTrack report, page 9.

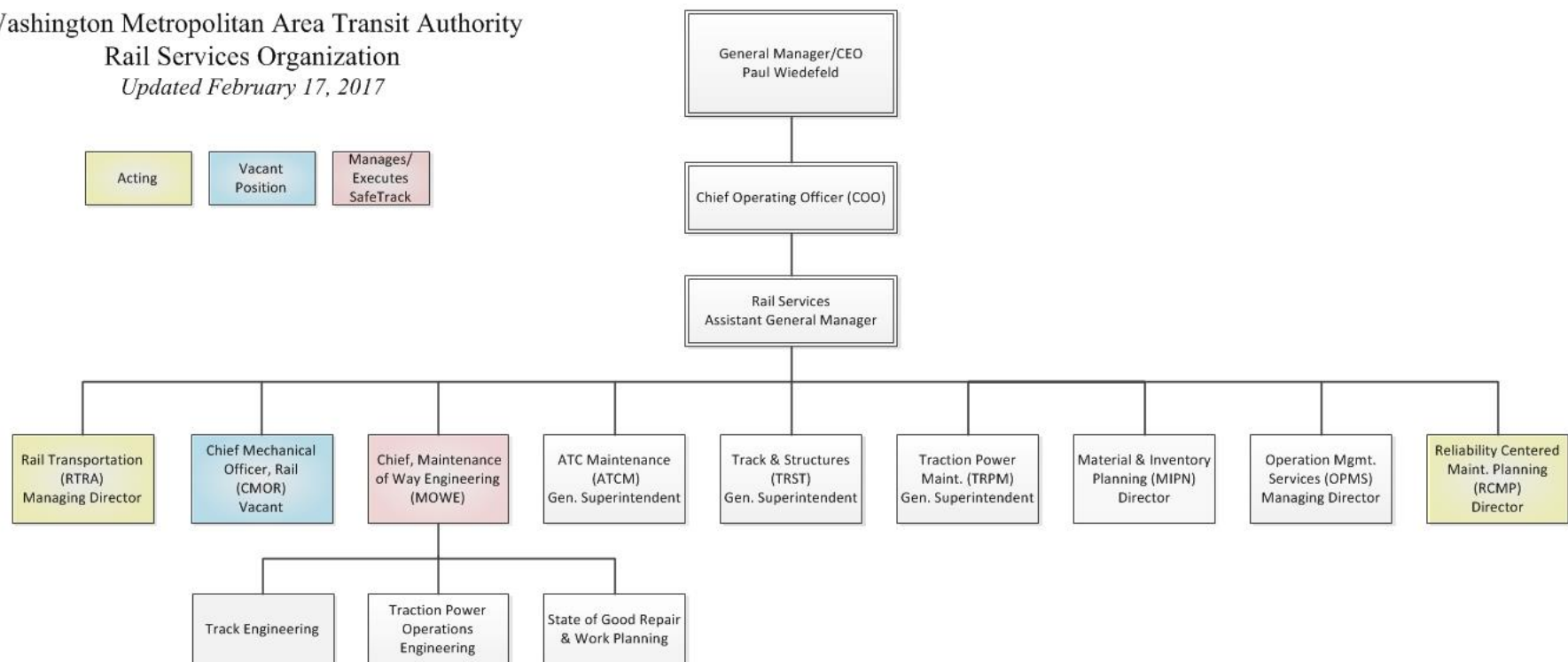
Note 4: WMATA reported 1,060 feet of cable replaced in lieu of report number of cables replaced as it had for the first 11 surges.

APPENDIX D – ORGANIZATION CHARTS & DESCRIPTION

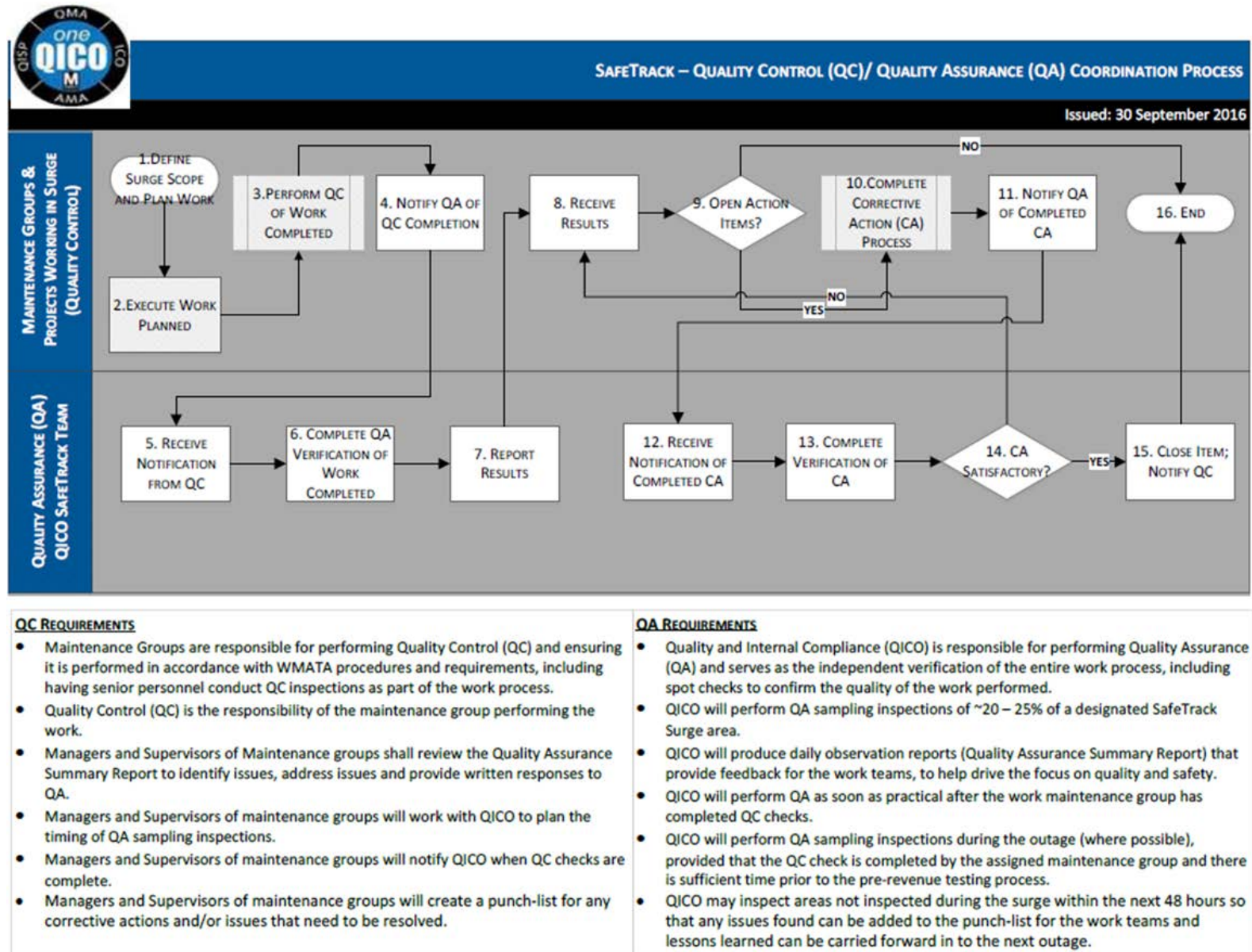
Washington Metropolitan Area Transit Authority
Updated February 26, 2017



Washington Metropolitan Area Transit Authority
 Rail Services Organization
Updated February 17, 2017

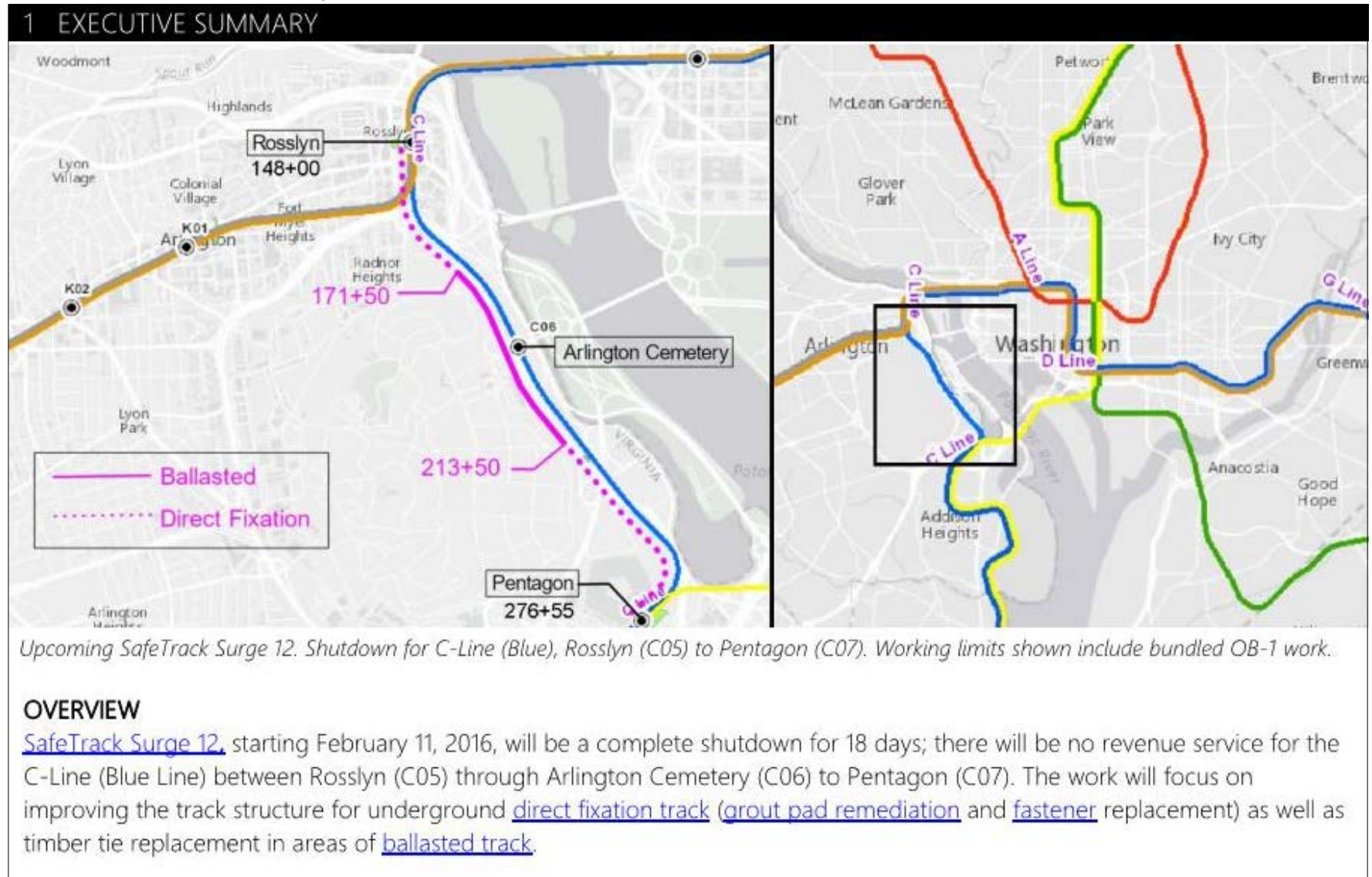


APPENDIX E – SAFETRACK QC / QA COORDINATION PROCESS



APPENDIX F – QICO’s QUALITY PRE-SURGE 12 REPORT

(Dated 2/7/2017) (“C Line” only)



PURPOSE

The **Office of Quality Assurance, Internal Compliance and Oversight (QICO)** provides independent reviews of WMATA operational processes and assets; for WMATA’s SafeTrack program, QICO’s infrastructure team provides review of SafeTrack activities, produces recommendations for maintenance departments and follows up on open items in order to improve the quality of future SafeTrack surges. QICO recently conducted an independent walking track inspection for upcoming SafeTrack Surge 12. Field observations were compared to WMATA’s defect and [speed restriction](#) history in [Optram/Maximo](#), as well as scopes of work provided by maintenance groups. The completed inspection and the following analysis provide a robust *second line of defense* to ensure critical SafeTrack maintenance items are addressed and tracked to completion during the surge.

RESULTS

In comparison to previous SafeTrack surges, QICO noted fewer occurrences of safety-critical items with regards to the track structure. This is understandable given the fact that the track between C07-C05 experiences the lowest annual tonnage in the Metrorail system (11 MGT based upon 6-car trains, AW-2 loading, present frequency – [See Attachment 8](#)). However, the route contains some of the oldest track components in the system (commissioned in 1977). As a result, the ballasted section of track has experienced timber tie degradation and is in need of maintenance (particularly Track C2). [Direct fixation fastener](#) replacement has been conducted previously in several key locations (on the [high rails](#) in some curves), but fasteners throughout the Surge 12 working limits are reaching the end of their predicted lifespan (Hixon H-12, Landis, and LB Foster F-17 fasteners); note that there is a cluster of previously observed fastener defects on Track C1 between C1 140+00 and C1 170+00 ([Attachment 6: Optram Data](#)). In addition, Hixon H-12 fasteners installed during the original construction of this section of track have been previously identified to have inadequate design for lateral forces and should be removed ([Attachment 7: Excerpt on Hixon H-12 Fastener](#)). Finally, QICO recommends several other concerns be attended to, including platform maintenance at Arlington Cemetery Station (C06), replacing deteriorated ATC [marker coils](#), and improving the poor state of tunnel lighting on Track C2 near Pentagon Station (C07).

APPENDIX G – SAFETY AND SECURITY CHECKLIST

Updated 2/6/17

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 <u>safety design criteria</u> ?	Y	WMATA Manual of Design Criteria for Maintaining and Continued Operation of Facilities and Systems.
Has the Project Sponsor ensured the development of <u>security design criteria</u> ?	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.		
Has the Project Sponsor ensured the performance of safety and security analyses for proposed work-arounds?	Y	SAFE has the responsibility for hazard 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: <ul style="list-style-type: none">• 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 Recordable Rate	National Average
		WMATA	PMOC Verifying	PMOC Verifying
If the comparison is not favorable, what actions are being taken by the Project Sponsor to improve its safety record?	Open	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)	N/A	No shared track. This is a heavy rail transit project. There is no FRA involvement.
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?		

APPENDIX H – ACTION ITEMS – SAFETRACK PROGRAM

PR	ITEM	IDENTIFICATION	NATURE OF PROBLEM	D	A	I	COMMENTS	PMOC STATUS
2	2A	Incorporate PMOC comments on PMP Rev 0 and issue Revision 1.	No plan was developed before this project began.	Y	N	N	FTA & PMOC have discussed development of the PMP with the SafeTrack management team on several occasions. The SafeTrack team submitted Revision 0 of its PMP to the PMOC and FTA on 9/30/16. PMOC furnished review comments to FTA on 10/26/16. A PMP workshop with SafeTrack and PMOC was held on November 18, 2016. PMOC discussed revisions to the PMP with SafeTrack Team on December 5, 2016, and then received Revision 1 on December 19, 2016 for review and comment. PMOC's comments were submitted to FTA and SafeTrack team on January 30, 2017. A teleconference to review comments on PMP took place on February 15, 2017. On February 22, 2017, PMOC provided comments on Revision 2 to FTA. SafeTrack Team submitted Revision 3 to PMOC on February 24, 2017. On February 27, 2017, PMOC submitted comments on Revision 3, and then received Revision 4 from SafeTrack Team that same day.	R

ITEM KEY

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

LEGEND

PRIORITY (PR)

- 1- Most Critical
- 2- Critical
- 3- Least Critical

PROJECT SPONSOR ACTION

- D – Remedial Action Developed
- A – Remedial Action Approved
- I – Action Implemented

PMO CONTRACTOR STATUS

- R – Review On-going
- C – Completed – No further review required

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

APPENDIX I – 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													
Surge 2 — Eastern Market - Benning Rd & Minn. Ave	18-Jun-16	3-Jul-16													
Surge 3 — Natl. Airport - Braddock Rd	5-Jul-16	11-Jul-16													
Surge 4 — Natl. Airport-Crystal City-Pentagon City	12-Jul-16	18-Jul-16													
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													
Surge 9 — Vienna - West Falls Church	15-Sep-16	26-Oct-16													
Surge 10 — NoMa - Fort Totten	29-Oct-16	22-Nov-16													
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	15-Apr-17	14-May-17													
Surge 15 — Minnesota Avenue - New Carrollton	<i>May-Jun (Dates TBD)</i>														
Cherry Blossom Festival	15-Mar-17	16-Apr-17													
Surge 16 — Shady Grove - Twinbrook	<i>June (Dates TBD)</i>														

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