



# SafeTrack: Surge 4

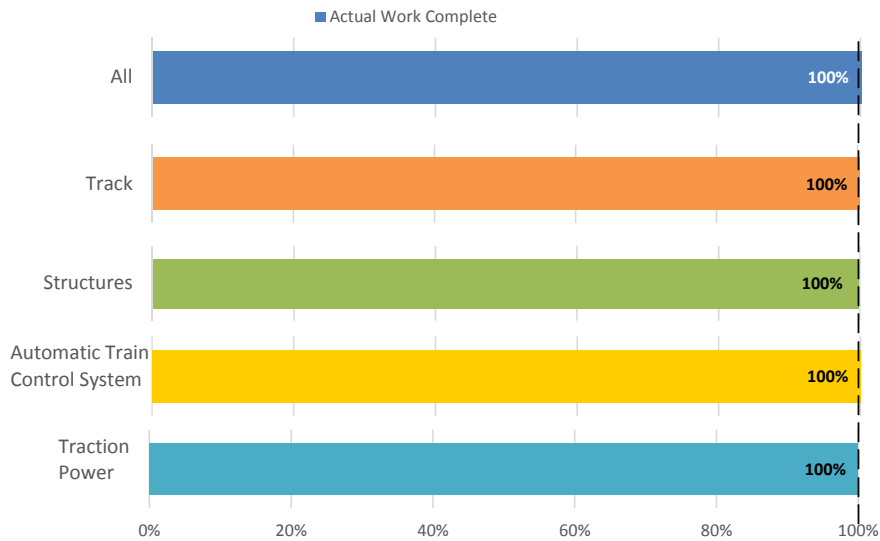
**DATES:**  
July 12 - 18

**WORK ZONE:**  
Pentagon City to Reagan National Airport, Line Segment Shutdown (Crystal City Station Closed)

*Final Report  
Data as of 07/21/16*

**SCOPE OF WORK:** Renewal of rail and power infrastructure on this portion of the Blue and Yellow lines, including rail, fasteners, grout pads, and power cables.

**Overall Progress (% Planned Work Complete)**



**Notes:**

\*Surge #4 results are preliminary and subject to quality control processes which will remain continuous throughout the duration of SafeTrack. Any remediation work that is identified will be accomplished during normal maintenance times.

Actual work complete represents the % complete across all tasks.

Surge 4 concluded on July 18, 2016 with all critical tasks completed. During the surge, priority was given to addressing potential defects and repairing or replacing critical rail infrastructure that affects train speeds and ride quality. Additional regular and preventive maintenance activities were fit in as time permitted. These maintenance activities are and will continue to be conducted on a regular basis to keep the infrastructure in a state of good repair.

Most of the work zone was in tunnels, where rail is affixed to grout pads with fasteners and studs. As a result, there was much less crosstie and insulator renewal scheduled, and work crews were more shielded from hot temperatures.

The critical tasks completed during the surge include:

- + Welded 26 joints on the rail, improving ride quality and safety
- + Replaced over 2700 linear feet of rail
- + Renewed over 950 linear feet of grout pad
- + Replaced over 2400 fasteners and 1500 studs, some of which were original components
- + Cleaned and repaired tunnel drainage system to help prevent water damage to new components

Shutting down this segment of the Blue and Yellow line allowed the necessary repairs to be completed much more quickly than would otherwise be possible. Replacing over 2400 fasteners would take about 80 nights if performed only after the system closed, or 7 weekends of single-tracking. Replacing 950 feet of grout pads would take two full weekends of single-tracking.

In addition, crews completed preventive maintenance activities, including inspecting and repairing lighting in tunnels and cables at traction power substations and breakers.





# SafeTrack: Surge 4 Detailed Report

Final Report: 7/21/2016

	Task	unit	Completed During Surge
<b>Track</b>	Crosstie renewal	# crossties	81
	Insulator replacement	# insulators	31
	Fastener renewal	# fasteners	2,463
	Stud renewal	# studs	1,572
	Third Rail maintenance	# linear feet cover board	310
	Spot Rail renewal	# linear feet	2,730
	Joint elimination	# joints welded	26
<b>Structures</b>	Grout Pad renewal	# linear feet grout pad	959
	Drain maintenance	# grates/baskets	28
	Track Bed cleaning	# linear feet	3,200
<b>Automatic Train Control System</b>	Track Junction Box repair/replacement	# boxes	38
<b>Traction Power System</b>	Power Cable repair/replacement	# cables	54
	Tunnel Light repair/relamp	# units	178