COMPREHENSIVE MONTHLY REPORT

May 2012

Dulles Corridor Metrorail Project Extension to Wiehle Avenue

Metropolitan Washington Airports Authority Washington, DC

June 21, 2012

PMOC Contract Number: DTFT60-09-D-00016

Task Order Number: 002, Project Number: DC-27-5142, Work Order No. 03

OPs Referenced: 01, 25 **Hill International, Inc.** One Penn Square West 30 South 15th Street Philadelphia, PA 19102

PMOC Lead:

Length of Time PMOC Assigned to Project: 11.5 years **Length of Time PMOC Lead Assigned to Project:** 4.0 years

TABLE OF CONTENTS

EXE	ECUTIVE SUMMARY	1
1.	PROJECT DESCRIPTION	1
	PROJECT STATUS SUMMARY	
	PMOC'S ASSESSMENT OF PROJECT STATUS	
	IN REPORT	
1.	. Grantee's Capabilities and Approach	
	a. Technical Capacity and Capability	
	b. Project Controls	
	c. Compliance	
2.	. Project Scope	
	a. Design Status	
	b. Bidding and Construction Status	
	c. Real Estate	
	d. Utility Coordination	12
	e. Vehicle Procurement	
	f. Safety and Quality Status	
	. PROJECT MANAGEMENT PLAN AND SUB-PLANS	
4.	. Project Schedule	
	a. Critical Path Evaluation	
	b. Important Activities – 90-Day Look Ahead	
5.	. Project Cost	
	a. Explanation of Variances	
	c. Project Funding Sources: October 2011	
	. Project Risks	
7.	. ACTION ITEMS	27
APP	PENDICES	28
	APPENDIX A – LIST OF ACRONYMS	20
	APPENDIX B – PROJECT OVERVIEW AND MAP	
	APPENDIX C – SAFETY AND SECURITY CHECKLIST	
	APPENDIX D – PMOC TEAM PERFORMING THIS REVIEW	
	ALI ENDIA D - I MOC LEAM LERI ORIMINO THIS REVIEW	

EXECUTIVE SUMMARY

The Project Management Oversight Contractor (PMOC) met with Metropolitan Washington Airports Authority (MWAA) on *June 7, 2012* to conduct a monthly progress meeting *for* work performed in *May 2012*. The full time on-site PMOC attended various project meetings and site tours throughout this reporting period. Additional information for this report was obtained from MWAA during the *first and second weeks of June 2012*. Future PMOC monthly progress meetings are planned to occur during the first week of each month.

1. Project Description

MWAA, in cooperation with the Washington Metropolitan Area Transit Authority (WMATA), proposes to implement a 23.1-mile rapid transit system in the Dulles Corridor of Northern Virginia. The proposed corridor follows the alignment of the Dulles International Airport Access Highway (DIAAH) and the Dulles Toll Road within Fairfax County, and the Dulles Greenway, a private toll road in Loudoun County. The Project (Initial Operating Segment) undertakes the construction of the initial 11.7-miles of the rail project from the existing Metrorail Orange Line just east of the West Falls Church (WFC) Station to a station to be constructed at Wiehle Avenue with a total project cost of \$3.142 billion. Included in the Project are five new stations (Tysons East, Tysons Central 123, Tysons Central 7, Tysons West and Wiehle Avenue), improvements to the existing yard at WFC, and tail tracks beyond the Wiehle Avenue station. Sixty-four additional rail cars are required to provide service for the Project. Based on the Full Funding Grant Agreement (FFGA), the Revenue Service Date (RSD) is December 1, 2014. The Federal New Starts share is \$900 million, along with \$75 million in Surface Transportation Program (STP) funds, for the Initial Operating Segment (extension to Wiehle Avenue). Through Federal fiscal year (FY) 2011, Congress has appropriated \$520.28 million in Section 5309 New Starts funds for the Project. The FTA has awarded \$520,282,364 in Section New Starts and \$75,000,000 in STP funds to date for the Project. The FY 2012 Appropriation is \$90,832,000 in Section New Starts funds.

2. Project Status Summary

The FTA and PMOC met with MWAA on June 7, 2012 to conduct a monthly progress review meeting and supplemental information was obtained from MWAA during the following week. The status of information is as of May 30, 2012, unless otherwise noted.

- **Real estate acquisition** continues to keep ahead of construction requirements, often resorting to rights-of-entry (ROE) to gain access to required parcels.
- Rail car Procurement The 7K Monthly Progress Review Meeting *No. 21* was held on *June 14*, 2012. The Preliminary Design Review (PDR) phase was completed on March 16, 2012 compared to the *mitigation schedule* completion date of *January 18, 2012*. The current Final Design Review (FDR) completion date is *July 17*, 2012 compared to the mitigation schedule completion date of *March 22*, 2012, a slippage of *116 calendar* days. FDR meetings have been completed with the exception of train wayside equipment. The submission and acceptance of final design documentation remains.

On October 20, 2011, WMATA approved Kawasaki's Master Program Schedule (Baseline). WMATA subsequently approved Kawasaki's Mitigation Schedule, due to the March 2011 tsunami/earthquake, on December 21, 2011 with a June 12, 2015 *conditional acceptance* date for the 64th railcar, which was more than six months beyond the FFGA completion date for the DCMP. MWAA informed the FTA's Regional Administrator for Region III by letter on January 31, 2012 of the delay.

- **Design progress** Overall project design remains at 99% complete as of the end of *May* 2012. Revised designs for the Tysons West Station pedestrian bridges and pavilions were completed and permitted on March 27, 2012. However, 100% design of the Tysons West Kiss & Ride Lot is not expected until July 2012. The revised designs for the Tysons Central 123 Station pedestrian bridges and pavilions were submitted to DGS on May 1, 2012 and permits are expected by June 30, 2012. *DTP's submission of a* code modification package for the Wiehle Avenue pedestrian bridge and pavilion is expected *in mid-June 2012* to add an emergency call station and the permit is expected by *mid-July*, 2012.
- MWAA issued a NTP on January 24, 2011 to an independent third-party consultant, Battelle, to review Alstom's safety analysis of the Generation 4 track circuit modules proposed for use on the Dulles Extension. MWAA reported during the *June 7*, 2012 monthly progress meeting that Battelle still expects to submit its draft "Safety Analysis Review and Assessment" report to MWAA for review in late June, 2012. Following this final review, MWAA will meet with Battelle and discuss a revised schedule for the "Final Assessment Report" submission to the FTA.
- Construction progress is broken into two components: utility relocation (UR), which is 99% complete, and design-build (DB) construction, which is approximately 73% complete. Significant accomplishments for May included significant segmental box girder installation on the Tysons West Guideway with Launch Girder Truss LG2; wall, track-bed, platform, column and mezzanine work on all five stations; both ballasted and direct fixation trackwork installation on the Tysons East Guideway, and along the DCR and DIAAH and Wiehle Avenue tail tracks; and significant progress with the construction of Traction Power Substations, Communications and Automatic Train Control Equipment Rooms and associated factory fabrication and delivery and installation of equipment.

CONSTRUCTION PROGRESS THROUGH MAY 2012											
GUIDEWAYS AND TRACKWAYS	% COMPLETE	STATIONS	% COMPLETE								
Tysons East Guideway	100%	Tysons East	52%								
Tysons West Guideway	94%	Tysons Central 123	46%								
O-3 Trackway	97%	Tysons Central 7	34%								
O-9 Trackway	96%	Tysons West	35%								
Systems	14%	Wiehle Avenue	57%								
Trackwork	34%										

• The DTP Schedule Update with a data date of *April* 25, 2012 "Mitigation Schedule" showed a -34 calendar day loss as compared to the -13 calendar day loss reflected in the *March* 25, 2012 update. MWAA and DTP continue to negotiate the mitigation schedule related RFC's 160 and 161 costs and anticipate a lump sum settlement in *late June* 2012. MWAA reported during the *June* 7, 2012 monthly meeting that they have agreed to the costs and the scope and *are now working towards mutually agreed language* for the final package which is being prepared for signature.

With regard to the West Falls Church Yard (WFCY) completion date, DTP's schedule update of *April* 25, 2012 reflected a WFCY completion date of January 9, 2014 which represents a -20 calendar day variance to the planned December 20, 2013 completion date.

- **Budget** status as of April 25, 2012 indicates that \$1,912,653,236 (70%, excluding the remaining contingency and finance charges) has been expended of the \$3,142,471,634 budget total. MWAA reports \$250,650,339 (99%) of the available contingency for the first eight contingency milestones has been drawn down to date with a remaining contingency balance of \$349,661 (1%) available through the eighth contingency phase. The current estimate of the contingency available at the end of construction is \$8.17M. portion of the Allowance Items recommended for award and yet to be awarded is estimated to be \$45.8 million over budget. This amount has not yet been added to the Contingency Obligation Table. FTA informed MWAA that this was unacceptable. MWAA acknowledges a \$71.8 million in available Finance Charges that could be added to the contingency to resolve this potential deficit. In addition, the PMOC has been reviewing changes to the project scope since Preliminary Engineering that could be considered betterments (non-FFGA) or Concurrent Non-Project Activities (CNPAs), and met with MWAA after the April 10, 2012 Update Meeting to discuss their findings. MWAA completed their assessment of Additional Scope – non-FFGA items (CNPAs) and submitted their results to the PMOC/FTA on April 24, 2012. Following review and approval, the Airports Authority would transfer the cost for the Non-FFGA Scope items from the FFGA Budget and Estimate at Completion (EAC), and replenish the contingency accounts (Federal and Non Federal) establishing a separate account with an "additional Funding Source" to capture the specific Non-FFGA scope. FTA asked for additional information on MWAA's proposal at the May 9 Quarterly meeting. MWAA submitted Letter No. 06747 dated May 24, 2012 with additional information which is currently under review.
- MWAA's estimate of the Earned Value for the Project through April is 74.0%.
- **Risk** -- The PMOC reviewed MWAA's updated Risk Assessment dated April 15, 2011. A series of meetings during the following eleven months led to submission of RCMP Revision 2c on March 5, 2012. The FTA and PMOC provided comments on March 16, 2012 and MWAA submitted RCMP Rev. 3 to the FTA for approval by letter dated March 28, 2012. The FTA approved the RCMP on April 13, 2012.
- The **Full Time Equivalents** (FTE) estimated total for *May* is 1,615, which is *an increase* of 22 from the *April* actual of 1,593. A fluctuation is to be expected with the winding down of design and civil construction and the ramping up of systems installation and testing. The

PMOC will continue to monitor this fluctuation to ensure that the project is appropriately managed to support the current "Mitigation Schedule."

• Core Accountability Items

FFGA-MWAA											
Core Accountability Items											
Project Status:		Original at FFGA:		Current Estimate*:							
Cost		Cost	Estimate		\$3.1	.42B	\$3.142B				
		Unal	located Continger	ncy							
Contingency		(Allo	Contingency ocated plus located)		\$297	.76M	\$8.175M				
Schedule		Reve	enue Service Date	;		nber 1, 014	February 5, 2014				
			Decede E	. 1:4	**		70.60/				
Total Project Percent Co	mplete	Based on Expenditu Based on Earned Va					70.6% 74.0%				
				-							
Major Issue	Status			Comn	Comments/Action/Planned Action						
Contingency/CNPAs (Additional Scope non- FFGA)	gency/CNPAs Project Partners have added additional activities to the				10, 2012 tive lists non-FFC ist on Ap 2012 Queen that ptions are nit their teed Letter 12 with a street list.	to revies of CNP GA); MV pril 24, 2 PRM, the MWAA and justific CNPA lier No. 06 additional	As (additional VAA submitted 012. At the				
Date of Next Quarterly M	Meeting:				Au	gust 22, 2	2012				

Note: * Through April 2012

3. PMOC's Assessment of Project Status

To address potential budget overruns, the PMOC concludes that MWAA needs to replenish the Project contingency and actively pursue items that may be additional scope (non-FFGA) and billed to the responsible parties. It is the PMOC's opinion that the change orders for WMATA-requested ETS and TPSS Remote Monitoring systems are outside MWAA's Intergovernmental

^{**} Excluding remaining contingency and finance charges

Agreement with WMATA, are additional scope (non-FFGA) to the project, and should be funded outside the FTA project. The PMOC's current assessment of CNPAs (non-FFGA additional scope) adds up to approximately \$94 million. This matter was addressed in follow-up meetings on February 2, 2012, March 7, 2012, April 10, 2012 and June 7, 2012 between MWAA and the PMOC. Efforts continue to arrive at an agreement as to what changes since PE constitute FFGA versus non-FFGA expenditures. MWAA acknowledges that the FTA and VDOT funding is fixed and that the local funding partners each bear a percentage of the non-FFGA scope costs.

The estimated cost overruns of the Allowance Items (\$88.2M of which \$45.8M is yet to be obligated) indicate that there is an immediate need to replenish the project contingency. Given the forecasted magnitude of the Allowance Items costs, the federal portion of the Project is, in the PMOC's opinion, on track to exceed the FFGA budget, if additional contingency is not provided and /or the Concurrent Non-Project Activities (CNPAs) are not addressed. The transfer of the \$71.8M in savings from the Finance Charges to Contingency can be used to manage the shortfall, regardless of the final disposition of the CNPAs. The PMOC continues to review both the use of contingency and the changes that can be considered CNPAs to determine the possible shortfall in contingency. MWAA reported during the March 7, 2012 monthly meeting that it would be replenishing the project contingency. PMOC again met with MWAA after the April 10 Update Meeting to review its findings with regard to CNPAs. Based on those discussions, MWAA submitted their final list of CNPAs through February 2012 to the FTA on April 24, 2012. During the May 9 QPRM the FTA requested that additional detailed descriptions and expanded justifications to the CNPAs. This was provided on May 24, 2012 via Letter No. 06747 and reviewed with the PMOC following the June 7 Update Meeting.

The Project continues working according to an agreed "Mitigation Schedule", authorized by MWAA's November 1, 2011 Directive Letter. The mitigation schedule with a data date of *April* 25, 2012 shows a -34 calendar variance to the contract schedule and now reflects an SSCD of *October 2, 2013*. Associated cost negotiations have been completed and the *language for the final package is still under discussion*.

DTP has incorporated the West Falls Church Yard construction into the mitigation schedule with a completion date of December 20, 2013. *The April 25, 2012 schedule update reflects -20 day variance to this completion date.* It remains the PMOC's opinion that the Project will be in revenue service within the FFGA specified date of December 1, 2014.

Kawasaki's ongoing struggle to address the impacts of the March 2011 earthquake and tsunami in Japan continues to be a concern to the PMOC. On December 21, 2011, WMATA approved a mitigation contract schedule that forecasts a conditional *acceptance* date of the 64th DCMP rail cars on June 12, 2015. This schedule does not meet the FFGA Revenue Service Date (RSD) date of December 1, 2014. MWAA informed the FTA Regional Administrator of the delay in a letter dated January 31, 2012. In this letter, MWAA writes "WMATA has stated that they would be able to provide sufficient rail cars from their existing fleet to begin service on the extension until the new Kawasaki rail cars are available. Therefore, we expect no impact to the FFGA, other than the late delivery of the rail cars." The PMOC continues to monitor WMATA's daily railcar availability statistics to see if WMATA is improving railcar availability. WMATA has developed an interim operating plan for dealing with the delay. However, the plan calls for using

six-car trains in lieu of a mix of six- and eight-car trains. This issue remains a concern of the FTA and PMOC. WMATA submitted this interim operating plan as part of the Rail Fleet Management Plan (RFMP). WMATA submitted RFMP Rev. 4F dated April 18, 2012 to the FTA on May 4, 2012. FTA and WMATA will be meeting to address this issue.

MAIN REPORT

1. Grantee's Capabilities and Approach

a. Technical Capacity and Capability

The PMOC prepared a Spot Report of Grantee Technical Capacity and Capability dated January 10, 2008 as part of the PMOC's effort to evaluate the Grantee's readiness to enter Final Design. The conclusion was that the MWAA project staff assigned to the Project was qualified. However, the MWAA direct staff was very thin with many project responsibilities assigned to MWAA's consultant team, Project Management Support Services (PMSS) team. The PMOC recommended that the Grantee add several staff positions and that reporting protocols be enhanced to ensure important project status information is shared in a timely manner with the Federal Transit Administration (FTA) and the PMOC. MWAA has adopted the recommendations and augmented their staff.

In September 2009, MWAA reorganized by implementing an integrated project management organization consisting of MWAA and PMSS staff. However, the personnel involved remained the same as was evaluated in the January 2008 Technical Capacity and Capability Report. It is the PMOC's opinion that the staffing levels and technical capabilities are still adequate. MWAA has hired Mr. William Kerrigan as Manager of Project QA/QC and Safety, replacing the retired Jon Christensen.

Upon completion of the project, WMATA will become the operator of this extension to their system. WMATA personnel have been active participants in the project.

b. Project Controls

MWAA has procedures in place with regard to monitoring and controlling project scope, quality, schedule, cost, risk, and safety. It is the PMOC's observation that MWAA continues to monitor and control the project in accordance with their procedures.

- The Project Schedule was updated by DTP through April 2012. In this update DTP reported a possible delay of -34 calendar days to the SSCD forecasted by DTP to occur on October 2, 2013. DTP's Critical Path No. 1 in their April 2012 Schedule Update originates with the permits needed to build the Tysons Central 123 Station South Pavilion. MWAA completed its schedule review on May 18, 2012 and did not accept the schedule and critical paths as presented by DTP. MWAA disagreed with DTP's Critical Path No. 1 and asserted that Critical Path No. 1 should be the Tysons West Station Buildout and Communications Systems Installation.
- MWAA continues to monitor expenditures to date and to update the estimate at completion. Through April, 2012, MWAA has drawn down \$250,650,339 of the Phases 1 through 8 contingency of \$251,000,000. The contingency utilization reflects expended costs. There is an additional \$38.94 million in obligated contingency of a budget of

\$46.77 million in Phases 9 through 12. This leaves a balance, as of the end of April, of \$8.18 million in remaining contingency.

- MWAA submitted the latest revision of the RCMP (Revision 3) to the FTA on March 28, 2012 and FTA letter of April 13, 2012 found it acceptable. For details, see section 3 "Project Management Plan and Sub-plans" below.
- The Quality Assurance (QA)/Safety group maintains an active schedule of audits and surveillances and accident data.

Through May 2012, there has been a cumulative total of 10,308,852 hours worked with four lost time accidents.

Revision 5 of the Safety and Security Certifiable Items List (SCIL) has been reviewed and all comments have been resolved. DTP's final resubmission on November 18, 2011 was subsequently accepted by MWAA. The SCIL for K99 (West Falls Church Yard) was received by MWAA on December 21, 2011 separately from the entire SCIL for review and comment. Informal comments for the K99 SCIL were provided to DTP on February 14, 2012 and a meeting to discuss the comments was conducted on March 26, 2012. Follow-up comments were officially sent to DTP on May 11, 2012 and the comment resolution process continues. *DTP and MWAA will conduct a second meeting to progress the K99 SCIL in mid- June 2012*. Once the K99 review is completed, DTP will submit Revision 6 of the SCIL in its entirety with K99 included.

DTP submitted revisions to the System Safety/Security Management Plan (SSMP) and DTP Procedures PPQ 01.06.02, Development and Maintenance of the Safety/Security Certifiable Items List and PPQ 01.06.03, Design Conformance Certification that MWAA accepted on December 6, 2010. The FTA and PMOC met with MWAA, WMATA, and DTP on April 29, 2011 and again on January 27, 2012 to discuss development and status of a revised SSMP to integrate WMATA and MWAA systems testing, interface management and pre-revenue operations. SSMP Revision 9 was completed in March 2012 and MWAA and WMATA approved the revised SSMP on March 20 and 22, 2012, respectively. The PMOC reviewed the completed revision and provided comments to the FTA on April 5, 2012. The FTA accepted SSMP, Rev.9 dated March 2012 on April 13, 2012.

c. Compliance

It is the PMOC's observation that MWAA continues to follow the required statutes, regulations and agreements.

MWAA submitted updates to the Amended Record of Decision Summary Mitigation Report to the FTA for the first quarter of 2012 on April 27, 2012.

2. Project Scope

a. Design Status

Except for the Tysons 123 Station pedestrian bridge and pavilion and the Tysons West Station Kiss and Ride Lot, DTP has completed design work with the receipt of permit approvals on the station designs. Issued for Construction (IFC) drawings for all five stations have also been completed. The Tysons Central 123 pedestrian bridge and pavilion Civil/Structural permit was approved May 9, 2012. The AMEP drawing package was submitted to DGS on April 20, 2012 and approval is anticipated in mid-June 2012. The Tysons Kiss and Ride Lot IFP drawings are expected to be ready for permitting in September 2012. The late issuance of IFP and IFC design packages has had no apparent adverse impact on the project's critical path, due in part to DGS permitting of partial packages.

b. Bidding and Construction Status

Through *April 2012, DTP* has awarded \$422,079,843 worth of the \$437,278,511 federally funded Allowance Items Budget to subcontractors and suppliers with an \$88,254,106 overrun for 33 of 37 sub-contract packages awarded thus far. In addition, MWAA has Allowance Items recommended for Award, but not yet awarded, worth \$144.7 million, which is an additional \$45.8 million over budget. The \$45.8 million does not include the remaining allowance items yet to be awarded, including Pavilion and Pedestrian Finishes (C3), Specialties (including signage) (C3), Installation of Public Art (C7), Spare Parts (C11), and Traction Power Supply – WP.10C [Instrument and Fiber Optic Cable] (C13).

Utility relocation is 99% complete, and DB construction is approximately 73% complete. Remaining utility relocation involves the installation of traction power ductbank and manholes for bridge crossings along the DIAAH from Route 7 to Route 267 and along the DCR between Route 123 and the WMATA K-Line.

The following are the major accomplishments of the DB contractor during May 2012:

• Operations Areas OP-1, OP-2 and OP-3 (I-66/DCR/Laydown Area 1) – Continued installation and testing of ATC cabling and equipment during non-revenue hours at the K-line. Continue installing Fire and Intrusion Alarm (FIA) and Telephone and Local Area Network Systems (Tel/LAN) conduits, cables and equipment in the Fisher Avenue TCR and Communications Rooms. Completed installation and commenced testing of the amazite flooring in the Fisher Avenue TPSS. Installed traction power feeders and jumper cables at the K-Line No. 15 turnouts and the double crossover during the May track outage. Continued installing traction power feeders from the track way into wayside manholes. Completed the de-stressing of the rail and closure welds on the outbound track on the O-1 guideway. Completed wall construction of the stage 2B of the WFCY Cut and Cover tunnel to the right of the eastbound DCR and continued roof construction work. Completed static testing of the traction power and ATC at the Plainfield and Baldwin locations. Continued installation of trackside ATC cable and making terminations in the median of the DCR. Installing FIA devices and wiring at TPSS #1.

Continued terminations of ATC cabling inside the TCR at TBS #2 location. Installed post and panel walls at the TBS #2 location. Continued installation of storm drain piping at the WFCY S&I building site. Facchina continued grading and paving the left shoulder areas on the westbound DCR adjacent to the new N-Line retaining walls.

- Operations Area OP-4/5A (Tysons East Guideway/Station/I-495 Crossing) Continued cable trough and track plinth construction on the aerial guideway between the Tysons East Station and I-495. Continued MEP installations. Continued assembly of escalators. Continued installation of duct banks to TPSS #3. Continued interior MEP rough-in at the precast TCR building at the platform level. Continued foundation walls, elevator pits and piers for the pedestrian bridge and pavilion. Continued pulling traction power cables in raceways and in cable troughs on the Tysons East Guideway from TBS #3.
- Operations Area OP-5 (Tysons Central 123 Station) Continued rebar and concrete construction at the mezzanine level and TPSS #4 roof. Continued raceway installation at the SC switchgear room, TPSS #4 and battery rooms. Continued installing HVAC ductwork at the platform level. Installing communications raceway in the lower level and platform service rooms. Installing traction power duct bank to TPSS #4. Started driving piles for the pedestrian bridge pavilion at the Macerich location along Route 123.
- Operations Area OP-6 (Laydown Area #6/NATM Tunnel/East Cut & Cover and Ventilation Structure) Completed pouring the fan room roof for the East Ventilation Structure. Continued interior MEP installations at the East Vent Structure building.
- Operations Area OP-6 (West Cut and Cover Tunnel) Continued rebar and concrete construction of the fan room roof at the West Vent Structure. Continued interior room mechanical rough in work at the West Vent Structure.
- Operations Area OP-7 (Tysons Central 7 Station) Completed pouring barrier walls adjacent to Route 7. Completed retaining wall construction at the entrance to TPSS #5. Continued raceway installations for the AC and communications cables under the platform and in service rooms and at TPSS #5. Continued forming and rebar installation for the north and south pedestrian bridge pavilion foundations. Continued duct bank construction for TPSS #5. Installing CMU walls for service rooms. Continued with track plinth and rail on the OB track from the cut and cover tunnel through the Station and west on the Tysons West Guideway.
- Operations Area OP-8 (Tysons West Station/Guideway) Continued guideway segmental girder erection with Truss LG2 completing spans 49-IB, 49-OB and 50-OB for a total of seventy-five completed to date. Started installation of steel framing for the mezzanine level curtain wall and pedestrian bridge entrance at the Tysons West Station. Continued installing acoustical panels on the elevated guideway between Gosnell Road and the Dulles Toll Road. Continued installation of the systems cable trays on the aerial guideway and piers. Continued CMU wall construction at the station ground and mezzanine levels. Continued installation of station precast panels. Completed driving

piles at the north pedestrian bridge pavilion and stated forming and rebar placement for the pavilion foundation. Completed an eastbound Route 7 road shift west of Spring Hill Road and mobilized pile driver for the south pedestrian bridge pavilion foundation. Delivered and set in place the TPSS #6 and began assembly inside the facility.

- OP-9 (DIAAH) Continued construction of retaining walls on both OB and IB sides between Hunter Mill Road and the Tysons West Abutment B. Continued internal assembly of TPSS facilities at TPSS #7 and #11 and started static traction power testing. Started static and temporary power ATC testing at the TCR/TPSS #7 location. Continued installation of ballasted track between Wiehle Avenue and Difficult Run. Completed installation of emergency crossover gates between DIAAH and the Toll Road. Continued installation of the building pad at TPSS #10. Continued installation of racks in the cable vault at TPSS #10. Completed installation of the track under drains in the median of the DIAAH between Trap Road and Route 7. Continued with cable trough installation from Tysons West abutment to Difficult Run. Continued installation of the Intrusion Detection Warning (IDW) System on track fencing in the median of the DIAAH.
- Operations Area OP-10 (Wiehle Avenue Station/Laydown Area 13) Continue MEP installations at the east and west platform service rooms and at the mezzanine level. Continued FIA and CCTV conduits at the supervisor kiosk and east service rooms. Continued installing equipment pulling cables at the station switchgear and battery rooms. Continued installation of cables and terminations in the TCR. Continued installing traction power cables between the track and TPSS #11 manholes. Completed the pier cap at the intermediate pedestrian bridge pier 2 at the north side of the station and pier 7 at the south side of the station. Mobilized and started driving piles for the pedestrian bridge piers 01 and 1 near the westbound Toll Road ramp. Completed slab construction of land bridges at the Williams Transco pipelines and retaining walls west of the Wiehle Avenue Station. Continued ballasted track construction, contact rails, traction power and ATC cable installations west of the station. Continued installation of sanitary sewer lines on the north side of the station. Completed installation of the roof membrane and continued with the skylight glass, wire mesh and standing seam roofing on the vaulted roof. Started static traction power equipment testing at TPSS #11.
- Laydown Area 10 (Pre-cast Yard) Continued staging and load out of precast segments for the Tysons West Guideways.

All Intergovernmental Agreements and Agreements with utility companies were executed prior to the FFGA.

c. Real Estate

Real Estate Acquisition continues to keep ahead of construction requirements, often resorting to ROE to gain access to required parcels. Through *May* 2012, *99* of the 102 parcels required for the Project have been acquired. The table below summarizes acquisition activities for the Project through *May* 2012.

PARCELS ACQUIRED1

(Number of parcel packages)

	Period			To Da	nte		
LOCATIONS	TOTAL	AL Planned ² Actual Var		Planned ²	Actual	Var	
Route 66 / DCR	1	0	0	0	1	1	0
Route 123	23	0	0	0	23	21	(2)
Route 7	52	0	2	2	52	51	(1)
DIAAH	26	0	0	0	26	26	0
TOTAL	102	0	0 2 2		102	99	(3)

Notes:

- 1. Parcels acquired through recordation of deed/easement and filing of Certificates of Take. These values include rights obtained for another 39 parcels for which Certificates of Take have been filed.
- 2. Planned values are based on the March 31, 2011 Property Acquisition Status Update.

Condemnation Status

Thirty-nine parcel packages have been obtained with the filing of thirty-two Certificates of Take. In May 2012, two cases moved towards an Agreement after Certificate (Parcel 86 Maximums Properties, LLC and Parcel 90 Kaiser Foundation Health Plan) two cases continues to work towards an Agreement after Certificate (Parcel 109, AG/ARC Plaza America and Parcel 125/JGB 1831 Wiehle Avenue, LLC), and two other cases continued to move toward having the Final Order entered for Agreements After Certificate (Parcel 35, Embassy Suites and Parcel 28, Stohlman).

d. Utility Coordination

Utility relocation work continued through *May 2012* and is considered to be 99% complete. DTP's utility relocation design team continues to address conflicts or field conditions when required and to coordinate all modifications with the A&R D-B contract requirements. Installation of facilities for each third party utility has been completed in Tysons Corner and all utility companies have completed the local tie-in conduits and cables required to modify their circuits in compliance with the overall Project utility design. All UR work along Route 7 is complete.

Specific utility relocation work completed and continuing through May 2012 includes the following:

- **Dulles Connector Road (DCR) East** (**K-Line to Route 123**) *DVP continued racking cables at the TPSS and splicing 34.5 kV traction power cables in the DCR median between Magarity Road and the future Redfield Substation.*
- Route 123 (DCR to Route 7) Cox Communications commenced lowering of existing conduit and cable adjacent to the Tysons Central 123 Station. AOC Connect completed the lift and lay of cable at the Tysons East Station Kiss and Ride Lot.

- Route 7 (Tyco/Westwood to Dulles Toll Road) DVP completed installing conduits, hand holes and switch pads at the Tysons West Station. DVP crews continue splicing cables in manholes on Tyco Road and eastbound Route 7 towards TPSS #6. DVP continues installing 34.5 kV cables in duct banks near TPSS #5.
- **DIAAH West -- (Route 7 to Wiehle Avenue)** *DVP continued installation of 34.5 kV traction power cables in duct banks and splicing cables in manholes along the westbound DIAAH between Hunter Mill and Difficult Run, and on the eastbound DIAAH between Hunter Mill and the W&OD Trail.*

e. Vehicle Procurement

WMATA is procuring the 64 rail cars required for the project. WMATA is also procuring 300 replacement rail cars under the same contract. The WMATA Board approved the award of a contract and a sharing of development costs with MWAA at its May 27, 2010 meeting. The MWAA Board agreed at its June 2, 2010 meeting to share the development costs associated with the railcar procurement equally with WMATA.

WMATA awarded a contract to Kawasaki on July 27, 2010. The manufacturer's proposed schedule showed the 64th car would be delivered by September 12, 2014 based on a July 12, 2010 Notice-to-Proceed (NTP), but WMATA did not issue the NTP until August 16, 2010. Thus, the contract indicated that the 64th rail car would be conditionally accepted on January 15, 2015 as an early completion date, which did not comply with the FFGA date of December 1, 2014.

On December 3, 2010, WMATA confirmed in a letter to MWAA that "sufficient resources including railcars will be available to support dynamic testing and initial revenue service in accordance with the Project's current schedule." WMATA confirmed that cars from the existing fleet would be made available for dynamic testing on the Dulles Extension. Since there would be a gap in the delivery of the 7000 Series rail car delivery and the revenue service date, WMATA outlined its strategies for being able to support initial revenue service using the existing WMATA fleet.

The Conceptual Design Review phase was completed on January 31, 2011 and the program moved into the Preliminary Design Review (PDR) phase. All PDRs were completed on March 16, 2012, more than eleven months past the original baseline schedule date of March 30, 2011. At the 7K Monthly Progress Review meeting held on *June 14, 2012*, Kawasaki reported that it anticipates that all documentation required for the Final Design Review (FDR) phase will be submitted by June 30, 2012 and a FDR completion date of July 17, 2012 compared to the *mitigation schedule* completion date of *March 22, 2012*, which represents a 116 calendar day delay. In order to mitigate this loss, Kawasaki has been performing work at risk pending completion of the FDRs.

On March 16, 2011, Kawasaki formally notified WMATA of potential delays that they believe would be considered excusable under the terms of the contract due to the

earthquake/tsunami in Japan on March 11, 2011. On December 21, 2011, WMATA approved Kawasaki's Mitigation Schedule with a June 12, 2015 delivery date for the 64th railcar, which is more than six months beyond the FFGA completion date for the DCMP. MWAA formally informed the FTA Regional Administrator in a letter dated January 31, 2012. As noted in the schedule table below, the actual completion date of the A-Car mockup was April 24, 2012, forty-six calendar days beyond the mitigation schedule completion date. *Master Test Plan, Revision B was submitted for review on May 29, 2012 and is anticipated to be approved by June 30, 2012, 143* calendar days beyond the mitigation schedule. *As noted above, the* completion of Final Design Reviews is now anticipated to be on *July 17*, 2012, *116* calendar days beyond the mitigation schedule.

The contractual milestones for this railcar procurement are:

Activity	Original Baseline Schedule Date	Mitigation Schedule Date	Actual Date
Notice to Proceed	July 12, 2010		August 16, 2010
Preliminary Design Review Submission	March 31, 2011	March 31, 2011	March 31, 2011
Preliminary Design Review Complete	May 1, 2011	January 18, 2012	March 16, 2012
Approval of Master Test Plan	August 23, 2011	February 7, 2012	
Approval of A-Car Mock-up	October 24, 2011	March 8, 2012	April 24, 2012
Final Design Review Submission	October 31, 2011	February 1, 2012	February 1, 2012
Final Design Review Complete	December 1, 2012	March 22, 2012	
Carbody/Truck First Article Inspection Approval	March 30, 2012	August 1, 2012	
Delivery of 4 pilot cars	September 16, 2013	February 20, 2014	
Conditional acceptance of 4 pilot cars	March 16, 2014	August 14, 2014	
Conditional acceptance of 64 th car	January 15, 2015	June 12, 2015	

WMATA has developed an interim operations plan for dealing with the delay. However, the plan calls for no eight-car trains and all six-car trains. This issue remains a concern of the FTA and PMOC. The PMOC continues to monitor both the progress of the procurement and WMATA's management. At the May 9 WMATA Quarterly meeting, WMATA pledged to meet with FTA to review alternative operating plans.

f. Safety and Quality Status

MWAA participated in *six* safety walk downs with DTP during the month of *May*. All were related to Design-Build work. As of *May 30*, 2012, DTP had logged 10.308 million project man-hours with 327 first aid cases and *six* lost time cases. There have been a total of 726 incident investigation reports, 84 utility hits and 15 vehicular accidents.

Revision 5 of the Safety Critical Items List (SCIL) was reviewed and all comments resolved. MWAA received the SCIL for K99 (West Falls Church Yard) on December 21, 2011, separately from the entire SCIL for review and comment. MWAA provided comments back to DTP on the K99 SCIL on February 14, 2012 and a meeting to discuss the SCIL was conducted on March 26, 2012. Follow-up comments were officially sent to DTP on May 11, 2012 and the comment resolution process continues. *DTP and MWAA will conduct a second meeting to progress the K99 SCIL in mid-June 2012*. Once the K99 review is completed, DTP will submit Revision 6 of the SCIL in its entirety with K99 included.

DTP and MWAA continue to meet every two weeks to review the status of issued for construction designs (including subcontractor designs) and to determine the status of sign-offs of the Design Conformance Checklist (DCC) and Construction/Procurement/Installation Conformance Checklist (CCC) items related to all issued for construction designs. The FTA and PMOC continue to express concern with the lack of progress on both the DCC and CCC submissions. In recent months, all partners have exchanged correspondence on these concerns and have been working together to address them. DCC No. 7 which has been revised twice was finally accepted on April 23, 2012. Submission No. 8 is anticipated on *June 15*, 2012.

A preliminary walk-down of K98 (K-Line Tie-in) was conducted by MWAA, WMATA, DTP and the PMOC on December 14, 2011 in an effort to refine the CCC process and expectations of each partner prior to the CCC No. 4 submission. It was a good effort and helped identify what documentation support MWAA and WMATA would need from DTP to validate sign-off acceptance. CCC No. 4 covering the K98 interface was submitted on March 19, 2012 with backup records and was reviewed and returned to DTP with comments on May 14, 2012. This CCC is intended to be the model for the remaining construction submissions and remains a work in progress.

It still appears to the PMOC that two DTP staff (one full time and one part time) tasked with managing the SCIL and sign-offs is still insufficient to adequately manage this important process.

Regular weekly visits to work sites by safety representatives from DTP, MWAA and WMATA continue. The Tri-State Oversight (TOC) and the FTA's on-site PMOC representative continue to meet monthly with the Safety/Security Certification Working Group (SCWG) and continue ongoing involvement in the certification process. The SCWG held its regular monthly meeting on May 15, 2012. *The next SCWG Meeting is scheduled for June 19*, 2012.

MWAA transmitted Revision 5 of the DTP System Safety/Security Certification Management Plan to the FTA on December 8, 2010. MWAA submitted its Safety and Security Management Plan, Revision 8, to the FTA on February 17, 2011. An FTA/PMOC Safety/Security Program Review Meeting was conducted with all stakeholders on April 29, 2011. FTA explained the requirement for a complete SSMP for the Dulles Corridor project that would carry through start-up, pre-revenue operations and to the Revenue Service Date.

MWAA and WMATA agreed to jointly develop a revised SSMP that will cover the roles and responsibilities of both MWAA and WMATA.

MWAA submitted Draft SSMP Rev. 9 to the FTA, PMOC, WMATA and TOC on September 30, 2011. A follow-up meeting was conducted with all parties on January 27, 2012 to review the progress made thus far. WMATA completed its revision of its SSCPP in March 2012. The SSCPP was subsequently incorporated as Appendix E into SSMP Revision 9 and MWAA and WMATA approved the revised SSMP on March 20 and 22, 2012 respectively. The PMOC reviewed the completed revision and provided comments to the FTA on April 5, 2012. The FTA accepted the SSMP on April 13, 2012.

During May 2012, MWAA and DTP performed the following QA audits/surveillances:

- KONE: DTP/MWAA conducted an audit on May 2, 2012. There were no observations. A report is being prepared.
- Job Hazard Analysis Process: DTP/MWAA conducted surveillance on May 3, 2012. There were seven recommendations. A report was issued on May 21, 2012 and the surveillance is closed.
- Sika Grout: MWAA conducted an audit on May 11, 2012. The audit generated the need for additional documentation that DTP is currently procuring.
- Delta Railroad: DTP/MWAA conducted an audit on May 30, 2012. There were three observations and a report is being prepared.

The MWAA QA Audit and Surveillance Schedule June/July 2012:

Tentative <u>Date</u>	Audit (A) Surv. (S)	Organization/Activity	Joint Audit/Surv.	<u>Lead</u>
6/13-14	A	DTP Startup and Test Program	Y	MWAA
6/27-28	A	Facchina Construction (Late C6)	Y	MWAA
7/11-/12	A	DTP System Safety and Security Program	N	MWAA

3. Project Management Plan and Sub-plans

The FTA accepted MWAA's **Project Management Plan** (PMP) Version 7.0 Final on February 14, 2011. FTA has requested that MWAA update its PMP to include the start-up and testing phase. MWAA submitted its Version 8.0 Draft to the FTA on May 1, 2012. *The PMOC provided its draft review and comments to the FTA on June 11, 2012.*

• MWAA submitted a revised **Quality Program Plan** (QPP), Revision 7 to FTA on January 7, 2010. MWAA reported that three Project Management Procedures were updated in the

period from April through June 2011. No new QPP procedure updates were made during the period from July through January 2012.

• MWAA's **Real Estate Acquisition Management Plan** (RAMP), Revision 2, dated September 15, 2009, has been reviewed by the PMOC with a recommendation that the FTA concur, with comments, with the revised RAMP. On January 21, 2010, the FTA provided comments to MWAA, and MWAA staff has revised Procedure PM-3.01 (Monitoring the Design-Build Contractor Property Acquisition Services). DTP revised their Procedure PIQ-5.1 (Property Acquisition Coordination) on November 1, 2010.

The FTA requested MWAA to update its **Risk and Contingency Management Plan** (RCMP), formerly called a Risk Management Plan (RMP), along with their Project Management Procedures to address Directive Letters and Contingency Drawdown Procedures. MWAA submitted the revised RCMP Rev. 3 on March 28, 2012, and the PMOC recommended FTA acceptance. The FTA accepted RCMP Rev. 3 as well as revised Project Management Procedure PM 5.07, Rev. 4, on April 13, 2012.

Since WMATA, rather than MWAA, will be the operator of the completed project, the WMATA Rail Fleet Management Plan (RFMP) is the applicable document. The FTA accepted the WMATA RFMP on September 25, 2007. However, WMATA updated the RFMP to reflect the 7000 Series Rail Car procurement and submitted a draft copy dated February 26, 2010 to the FTA for review and comment. The PMOC issued its Spot Report on its review of the draft RFMP on March 11, 2010, finding the plan to be deficient in many areas. The FTA, PMOC and WMATA continued the review and comment reconciliation process of various draft revisions. FTA and the PMOC provided some additional comments and WMATA's RFMP Rev. 4E dated March 14, 2012 was submitted to the FTA on April 10, 2012. FTA's comments on that revision were submitted to WMATA on April 12 with the request that the comments are incorporated and the final document then be formally submitted to the FTA Regional Administrator. WMATA submitted RFMP Rev. 4F dated April 18, 2012 to the FTA on May 4, 2012. It is under review by FTA and the PMOC.

Safety and Security Management Plan (SSMP) see Section 2f.

4. Project Schedule

Mainline - The project "Mitigation Schedule" update with a data date of April 25, 2012 reflects a -34 day loss as compared to a -13 loss reflected in the March 25, 2012 DTP's schedule shows the Revenue Service Date to be February 5, 2014. The FFGA RSD is December 1, 2014. MWAA completed its schedule review and wrote letter 06740 dated May 18, 2012 which rejected the schedule and critical paths and provided the detailed exceptions. The PMOC remains confident that the project can be completed before the FFGA RSD of December 1, 2014.

This mitigation schedule supersedes the previously approved recovery schedule with a data date of December 25, 2010 that was finally settled at \$7.2M in mid-September 2011 but does not relieve DTP from their obligations to the earlier recovery schedule. MWAA reported during the *June 7*, 2012 *Monthly Update Meeting* that RFC160 and RFC161 related to the mitigation

May 2012

schedule have been settled and the *language* for the final package for signature is still under discussion.

MWAA and DTP continue the ongoing and ever changing deliberation process of determining weather related excusable delay days as reflected in the table below. As a result, the SSCD has been adjusted to August 29, 2013.

Excusable Days of Delay through April 25, 2012

ACTION	WORK DAYS
Total Excusable Days of Delay on Project Critical Path requested by DTP	65
Contractually Identified	22
Retracted by DTP	16
Denied by MWAA/Disputed by DTP	6
Under evaluation by MWAA	0
Granted by MWAA	21

The schedule-related issues regarding the delivery of rail cars are discussed in section 2.f. Vehicle Procurement above.

West Falls Church Yard - The WFCY Civil/Site work final design was completed and issued for permit in October 2010. The S&I Building Issued for Permit (IFP) drawings were submitted to DGS on May 3, 2011 and they issued a permit on September 15, 2011. The Sound Cover Box IFP drawings were submitted to DGS on May 18, 2011 and DGS issued a permit on September 7, 2011.

The WFCY completion date continues to improve as MWAA and DTP continue to evaluate and refine the schedule. DTP's schedule update of *April* 25, 2012 shows a planned WFCY completion date of December 20, 2013 and also reflects a -20 calendar day variance which yields a forecast completion date of January 9, 2014.

Other problem areas with potential delays identified by MWAA include the following:

- DTP's non-performance in meeting recovery schedule dates in Stations and Aerial Guideways causing delays to Delta's access for track installation.
- DTP's non-performance in heavy civil construction operations, i.e. installation of retaining walls, ductbanks and manholes, jack & bore operations project-wide causing delays to Delta's access.
- Obtaining required weekend outages from WMATA for the K-Line Tie-in work.
- WMATA systems upgrade programs requested by WMATA could have numerous technical scope changes affecting Traction Power, Automatic Train Control, and Communications.

a. Critical Path Evaluation

Since November 1, 2011, the Project is managed utilizing the work plan set forth in MWAA's November 1, 2011 Directive Letter to implement a Mitigation Schedule with a data date of October 25, 2011.

In DTP's April 2012 Schedule Update, Critical Path No. 1, Construction of the Tysons Central 123 Station South Pavilion, has a -34 calendar day float for achieving SSCD on October 2, 2013. This path originates with issuance of DGS and VDOT permits to begin construction of the pavilion. DTP forecasts sixteen months construction duration for the pavilion, achieving completion on September 3, 2013 followed by punch-list, DGS inspections and issuance of the Certificate of Occupancy thus achieving SSCD on October 2, 2013.

MWAA disagreed with DTP's Critical Path in the April 2012 Schedule Update as presented for the following reasons:

- 1. MWAA's independent analysis indicates that this pavilion can be built in approximately one year with at least two months float to SSCD.
- 2. DTP's sequencing of activities for the Tysons Central 123 Station South Pavilion was incorrect and unduly over extended compared to six other similar pavilions.
- 3. DTP's Narrative stated that the schedule for this pavilion was all along a typical fragnet and had been revised in the April 2012 Schedule Update to reflect activities particular to the Tysons Central 123 Station South Pavilion. MWAA's analysis indicates DTP has used typical activities with generic durations not based on DTP's prior production rates or scope consideration. Instead, DTP revised the sequencing that resulted in extended construction duration.
- 4. DTP's statement that the pavilion schedule lack of refinement was due to pending construction authorization is also unjustified. Design of this work was finalized on January 19, 2012. Therefore, DTP could have developed an accurate schedule earlier.
- 5. DTP's critical and near critical path still includes several activities with durations over 20 work days, which is not in compliance with the contractual requirements.

In response to MWAA's not accepting the schedule and the above noted comments, DTP submitted its May 25, 2012 schedule update on June 1, 2012 which reflected a large improvement to the completion date. DTP stated that it "has incorporated a revised sequence for the WMATA OCC SCADA testing to mitigate the schedule impact for the RFC-139 Tysons Central 123 South Entry Pavilion, which results in a forecasted completion two days ahead of the SSCD."

The PMOC agrees with MWAA's assessment regarding the critical path. *This latest schedule and review again demonstrates* that MWAA continues to analyze the schedule

19

carefully and to hold DTP accountable for changes made to the agreed schedule. It is the PMOC's opinion that this is yet again a cavalier misuse of the schedule updates for purposes other than to accurately monitor schedule progress. The PMOC anticipates that new disagreements will continue to arise for claimed weather delays and change order impacts to the schedule as demonstrated by DTP's April 2012 schedule update.

The following table compares the milestone dates relative to the approved baseline schedule. The PMOC concurs with MWAA's assessment of the updated schedule.

	June 2008	December 2010	March 2012	April 2012
MILESTONE	Baseline	RECOVERY		
	Schedule	SCHEDULE		
Receipt of FFGA	$03/03/09^1$	03/10/09 A	03/10/09 A	03/10/09 A
Station Design Complete	10/21/09	02/18/11	10/28/11 A	10/28/11 A
Utility Relocation Complete	03/05/10	09/13/11	1/31/12 A	1/31/12 A
Aerial and Station Foundations	3/4/11	09/01/11	07/23/11 A	07/23/11 A
NATM Tunnels Mined	01/29/11	12/03/10 A	12/03/10 A	12/03/10 A
K-Line Tie-In	12/23/11	03/28/12	10/14/11 A	10/14/11 A
Guideway Complete	2/12/12	09/13/12	11/02/12	10/08/12
Train Control Complete	10/26/12	10/29/12	12/19/12	12/21/12
Substantial Completion	07/31/13	07/31/13	09/05/13	10/02/13
Revenue Operations - Target	11/27/13	01/20/14	01/09/14	02/05/14
FFGA Revenue Operations	12/01/14	12/01/14	12/01/14	12/01/14

Actual Date Date was not met.

b. Important Activities – 90-Day Look Ahead

The important milestones scheduled for the next 90 days include:

- Completion of station pedestrian bridges and pavilions designs/permitting.
- Formal Settlement of RFC 160 and 161 and the Recovery Schedule.
- Property acquisitions for the Tysons West Aerial Guideway (OP-8).
- TPSS #10 and #11 civil work. (Site work needs to be completed to allow Powell to proceed.)
- Property acquisition for Operations Area 9 and 10.

5. Project Cost

The SCC Budget and Expenditures summary for the period ending *April 25, 2012 is* shown below. Overall, approximately 70% of the budget (excluding contingency and finance charges) has been expended.

FTA SCC CODE	DESCRIPTION	BASELINE BUDGET	CURRENT BUDGET ¹	EXPENDED TO DATE	ESTIMATE AT COMPLETION		
10	Guideway and Track Elements	\$ 666,500,284	\$ 639,818,210	\$ 547,302,387	\$ 639,818,210		
20	Stations	\$ 317,023,979	\$ 312,344,874	\$ 176,316,909	\$ 312,344,874		
30	West Falls Church Yard	\$ 51,789,539	\$ 66,015,625	\$ 7,430,084	\$ 65,825,594		
40	Site Work & Utility Relocation	\$ 232,936,987	\$ 229,418,547	\$ 207,225,190	\$ 258,675,067		
50	Systems	\$ 278,157,645	\$ 323,119,924	\$ 151,127,037	\$ 319,970,,039		
60	Right of Way Acquisition	\$ 45,953,303	\$ 67,631,026	\$ 58,862,294	\$ 65,011,618		
70	Vehicles	\$ 211,629,775	\$ 195,352,701	\$ 33,803,886	\$ 194,648,939		
80	Professional Service	\$ 698,471,472	\$ 712,630,973	\$ 646,786,527	\$ 768,017,193		
90	Contingency Mgmt. Reserve	\$ 130,000,075	\$ 86,155,1183	\$ -	\$ 8,175,530		
100	Finance Charge	\$ 509,984,571	\$ 509,984,571	\$ 83,798,922	\$ 509,984,571		
	TOTAL (Federal portion)	\$ 3,142,471,635	\$ 3,142,471,635	\$ 1,912,653,236	\$ 3,142,471,635		

Notes: 1. Current budget equals FFGA amount plus approved Change Orders CO-001-081, 083-114, Directive Letters 001-038, UR-CO-001-039.

- 2. Estimate at Completion (EAC) for Contingency reflects the amount approved for utilization per PM-5.07 Rev4
- 3. The Estimate at Completion of Finance Costs includes \$71.8 million in allocated contingency.

a. Explanation of Variances

The major variances in the project budget are associated in seven categories as noted below and remain unchanged from last month:

- 1. SCC10 Guideway and Track Elements has been reduced approximately \$26.7 million due to the decision by the DB contractor to self-perform the NATM tunnel work. In so doing, \$29.2 million was transferred out of the direct account to other accounts including predominantly SCC80 for the professional services portion of the subcontract budget. This was offset by scope additions and other budget transfers, the most notable being the adjustment for the revised federal/non-federal split, the addition of the directive letter for crossing the Beltway during construction of the HOT Lanes Project by VDOT and the addition of sales tax to permanent materials.
- 2. SCC20 Stations has been reduced by approximately \$9.1 million. The decision by the Airports Authority to remove the Wiehle Avenue Parking Garage Allowance Item C-2, due to the Fairfax County Joint Development project, allowed the transfer of \$29.1 million out of the direct account into the unallocated contingency account. This was offset by a combination of add and subtract change orders, the most notable addition being the transfer from the tunnel subcontract.
- 3. SCC30 WFC Yard has increased by approximately \$14.0 million due to delay in progressing the design and additional requirements requested by WMATA.
- 4. SCC40 Site work and Utility Relocation has been increased by approximately \$38.8 million as a result of a combination of change events (change orders, directive letters and scope transfers) and cost overruns. The forecast adjustments are predominantly due to cost overruns in utility relocations.

- 5. SCC50 -- Systems has increased by \$30.65 million due to additional WMATA requirements for Traction Power Remote Monitoring, Emergency Trip Station/Amber Light Warning System and requirements for Communications.
- 6. SCC60 Right of Way Acquisition experienced nearly \$19.0 million increases primarily due to adjustment of project cost for the revised federal/non-federal split along Route 7.
- 7. SCC70 Vehicles has been reduced by \$17.2 million due to actual bid prices.
- 8. SCC80 Professional Services increased approximately \$69.7 million due to a combination of change events (\$17.8 million) and forecast adjustments (\$53.2 million). The change events are numerous with the most significant being the transfer from the tunnel subcontract and the addition of design for the HOT Lanes and WFCY. The forecast adjustment is predominantly attributed to higher project management costs for MWAA, PMSS and VDOT. In addition, WMATA budget transfers are treated as forecast adjustments.
- 9. SCC90 Contingency Management Reserve estimate at completion of \$8.18M *is* available for future use. The PMOC is of the opinion that the contingency reserve needs to be increased based on the current status of the contract and potential overruns for Allowance Items.

b. Monthly Cost Report: April 2012

DESCRIPTION		FI	FGA AMOUNT (Original)	EX	PENDITURE TO	-	ESTIMATE TO COMPLETE		ESTIMATE AT COMPLETION	PERCENT OF EAC EXPENDED TO DATE ⁷
	FED	ERA	L (FFGA SCOPE)							
Design-Build										
Firm Fixed Price		\$	1,112,052,173	\$	1,282,407,890	\$	373,822,773	\$	1,656,230,662	
Firm Fixed Price Insurance and Bonds		\$	65,109,408	\$	67,290,070	\$	2,410,546	\$	69,700,616	
	Firm Fixed Price Subtotal	\$	1,177,161,581	\$	1,349,697,960	\$	376,233,319	\$	1,725,931,279	
Subcontract Allowance		\$	430,199,817	\$	-	\$	84,543,844	\$	84,543,844	
	Design-Build Contract Prices	\$	1,607,361,398	\$	1,349,697,960	\$	460,777,163	\$	1,810,475,122	
Indexed Commodity Escalation		\$	77,469,926	\$	-	\$	45,148,158	\$	45,148,158	
	Design-Build Contract Total	\$	1,684,831,325	\$	1,349,697,960	\$	505,925,321	\$	1,855,623,281	73%
Utility Relocation										
Utility Work		\$	84,312,807	\$	101,463,729	\$	8,800,787	\$	110,264,515	
Terf Tax		\$	-	\$	-	\$	0	\$	0	
Project Management and Final Design		\$	8,423,426	\$	20,170,883	\$	113,757	\$	20,284,640	
	Utility Relocation Total	\$	92,736,233	\$	121,634,612	\$	8,914,543	\$	130,549,155	93%
Right of Way										
	Right Of Way Total	\$	42,443,132	\$	59,157,060	\$	6,479,558	\$	65,636,618	90%
WMATA Agreement	<u> </u>									
Vehicles		\$	195,138,329	\$	33,803,886	\$	160,845,052	\$	194,648,939	
Construction and Procurement		\$	31,484,799	\$	3,265,012	\$	24,833,105		28,098,117	
WMATA Force Account Startup		\$	13,777,100	\$	2,993,022	\$	10,411,999		13,405,021	
Project Management and Final Design		\$	31,235,400		18,012,158	\$	17,471,394		35,483,552	
, ,	WMATA Agreement Total	\$	271,635,628	\$	58,074,078	_	213,561,550	\$	271,635,628	21%
Preliminary Engineering ^{2,3}	_									
	Preliminary Engineering Total	\$	100,968,646	\$	100,730,999	\$	-	\$	100,730,999	100%
Airports Authority Services	, , ,									
General Conditions ⁴		\$	28,879,153	Ś	7,306,081	Ś	22,724,431	Ś	30,030,512	
Airports Authority Project Management and Wiehle				Ė		Ė		Ė		
Ave Garage		\$	23,225,717	\$	28,211,216	\$	18,199,907	\$	46,411,122	
Project Management Support		\$	90,004,649		104,042,308		19,651,910		123,694,218	
	Airports Authority Services Total	\$	142,109,519		139,559,605		60,576,247		200,135,852	70%
Contingency ⁵										
,	Contingency Total	\$	297,762,579	\$	-	\$	8,175,530	\$	8,175,530	
Finance Costs										
	Finance Costs Total	\$	509,984,571	\$	83,798,922	\$	426,185,649	\$	509,984,571	
Total Federal (FFGA Scope)		\$	3,142,471,635	\$	1,912,653,236	\$	1,229,818,399	\$	3,142,471,635	70%

¹ Reflects Paid costs through April 30, 2012

² Preliminary Engineering Period (PE) - Prior to August 1, 2007

³ Preliminary Engineering actuals have been agreed to be \$100,730,999 This is \$237,646 under the original budget of \$100,968,646 The under run is transferred to unallocated

⁴ The line item marked General Conditions includes Temporary Facilities Development, Hazardous Material Remediation, Miscellaneous Access Roads and Wiehle Ave Garage

⁵ Estimate at Completion for Contingency reflects the amount approved for utilization per PM-5 07 Rev $\,4\,$

 $^{6\,}The\,\,Estimate\,\,at\,\,Completion\,\,for\,\,Finance\,\,Costs\,\,includes\,\,\$71\,\,8\,\,million\,\,in\,\,allocated\,\,contingency$

⁷ Percent complete excludes contingency and finance charges

c. Project Funding Sources: April 2012

SOURCES OF CAPITAL FUNDING	GRANT ID	PERCENT AT COMPLETE	TOTAL EXPENDED TO DATE ¹		PERCENT FUND SOURCE EXPENDED TO DATE	REMAINING	
Sec 5309 New Starts Federal Funds		•					
Preliminary Engineering Grants			\$	54,412,526	\$ 54,412,526	100%	\$ -
Final Design Grant	VA-03-0113-00		\$	159,001,838	\$ 159,001,838	100%	\$ -
ARRA Construction Grant	VA-36-0001-00		\$	77,260,000	\$ 77,260,000	100%	\$ -
FFGA Construction Grant	VA-03-0113-02		\$	28,809,000	\$ 28,809,000	100%	\$ -
FFGA Construction Grant	VA-03-0113-03		\$	85,000,000	\$ 85,000,000	100%	\$ -
FFGA Construction Grant ⁵	VA-03-0113-04		\$	115,799,000	\$ 115,799,000	100%	\$ -
FFGA Balance	Planned		\$	379,717,636	\$ -	0%	\$ 379,717,636
Subtotal - New Starts		28.64%	\$	900,000,000	\$ 520,282,364	57.81%	\$ 379,717,636
Other Federal Funds							
Sec 5307 Surface Transportation Program							
Construction Grant	VA-95-X056-01		\$	47,218,109	\$ 47,218,109	100%	\$ -
Construction Grant	VA-95-X056-02		\$	21,281,890	\$ 21,281,890	100%	\$ -
Construction Grant	VA-95-X056-03		\$	6,500,001	\$ 6,500,001	100%	\$ -
STP/Sec. 5307		2.39%	\$	75,000,000	\$ 75,000,000	100%	\$ -
Local Funds							
VTA 2000			\$	51,700,000	\$ 51,700,000	100%	\$ -
Commonwealth Transportation Bonds ^{2,5}			\$	125,000,000	\$ 113,600,000	91%	\$ 11,400,000
Fairfax County Funds ^{3,5}			\$	523,750,000	\$ 299,780,482	57%	\$ 223,969,518
Dulles Toll Road Revenues ^{2,4,5}			\$	1,467,021,634	\$ 852,290,390	58%	\$ 614,731,244
Subtotal - Local Funds		68.97%	\$	2,167,471,634	\$ 1,317,370,872	60.78%	\$ 850,100,762
Total Project Budget		100%	\$	3,142,471,634	\$ 1,912,653,236	60.86%	\$ 1,229,818,398
Interrelated Highway Activities			\$	123,208,229	\$ 79,439,529	64.48%	\$ 43,768,700
DTR Revenues/Commonwealth Funds ³			\$	123,208,229	\$ 79,439,529	64.48%	\$ 43,768,700
		Total	\$	3,265,679,863	\$ 1,992,092,765	61.00%	\$ 1,273,587,098

¹Reflects costs through April 30, 2012

6. Project Risks

In August 2008, FTA directed the PMOC to resume the risk process and to prepare a report that combines the requirements of PG-40: Subtasks PG-40E, PG-40F, and PG-40G. These subtasks are to identify the framework for primary and secondary mitigation of project cost and schedule. A draft PG-40EFG report was prepared and the Risk Register was updated. The documents were shared with MWAA and a workshop was held on August 26-27, 2008 to review the Risk Register, reach a consensus on the top ten costs and schedule risks and to identify MWAA's cost, schedule and secondary mitigation procedures. The PMOC issued the Final PG-40EFG spot report on October 6, 2008.

Budget Risks: Through *April 25*, 2012, MWAA reports that it has utilized \$250,650,339 (99%) of the \$251,000,000 available contingency for the first *eight* contingency milestones leaving a contingency balance of \$349,661 (1%) available through the *eighth contingency* phase. The contingency utilization reflects expended costs. MWAA estimates that *the third contingency* phase, Utility Relocation Program, will be fully completed in the second quarter of 2012. MWAA reports that it has already obligated \$38,939,713 of the \$46,762,579 available for *Phases 9* through 12. As of *April 25*, 2012, of the \$297,762,579 total project contingency, the project has a total of \$8,175,530 available. However, MWAA estimates that the cost of the

In January 2010, \$23.6M previously identified as pay-go Dulles Toll Road (DTR) Revenues were reclassified as Commonwealth Transportation Board (CTB) funds, reducing the contribution from DTR revenues and increasing the contribution from CTB funds.

³ Includes Tax District Revenues (\$400M) plus debt service costs allocated to Project Budget

⁴ Includes pay-as-you-go revenues and bond proceeds

⁵ Expenditures includes accruals.

Allowance Items recommended for award, but not yet charged to the project is estimated to be \$45.8 million over budget. Thus, the project may be officially over budget in the near future unless MWAA determines other courses of action.

To address potential budget overruns, the PMOC concludes that MWAA needs to replenish the Project contingency and actively pursue items that may be additional scope (non-FFGA) and billed to the responsible parties. The PMOC's current assessment is that MWAA needs to add approximately \$94 million in Contingency.

The projected overruns in the costs of the Allowance Items of \$88.2M, of which \$45.8M is yet to be obligated, indicate that there is an immediate need to replenish the project contingency. Given the forecasted magnitude of the Allowance Items cost overrun, the Project is, in the PMOC's opinion, on track to exceed the FFGA budget, if the additional scope (non-FFGA) is not removed from the federal project. The PMOC continues to review both the use of contingency and the changes that can be considered additional scope (non-FFGA) to determine the shortfall in contingency. This matter was again progressed during a follow-up meeting on April 10, 2012 between MWAA and the PMOC. MWAA completed their assessment of Additional Scope – non-FFGA items (CNPAs) and submitted their results to the PMOC/FTA on April 24, 2012 via letter No. 06604. During the May 9 QPRM, the FTA/PMOC requested additional description and justification information. MWAA provided that information via Letter No. 06747 dated May 24, 2012. Following review and approval, the Airports Authority will transfer the cost for the Non FFGA Scope items from the FFGA Budget and Estimate at Completion (EAC), and replenish the contingency accounts (Federal and Non Federal) establishing a separate account with an "additional Funding Source" to capture the specific Non FFGA scope.

MWAA acknowledged that the FTA and VDOT budgets are fixed, that the other funding partners bear a percentage of the non-FFGA budget overruns; all principles understand their financial responsibility and all budget overruns will be managed according to the agreed funding plan.

MWAA also acknowledges a \$71.8 million in potential additional contingency from a reduction in budgeted Finance Charges. In a discussion following the February 2, 2012 progress meeting, the FTA concurred with MWAA's request to allow the finance cost savings to be re-allocated to contingency. MWAA will address this change in the near future.

MWAA's estimate of the **Earned Value** for the Project through *April 2012* is 74.0%.

Schedule Risks. With regard to Schedule Contingency, MWAA and DTP agreed to a zero loss recovery schedule with a data date of December 25, 2010. This recovery schedule had a mitigation period of fourteen months, extending from January 2011 through February 2012 to recover 113 calendar days of the total of 510 calendar days. MWAA and DTP are now working off a new Mitigation Schedule with a data date of October 25, 2011 that was accepted "as noted" on November 23, 2011. Through *April* 2012, MWAA has granted DTP time extensions of *21* work days days reducing the available contingency from 510 to *481* calendar days.

The following are the Project's current Top 10 Cost and Schedule Risks from the RCMP dated December 2011 and transmitted on March 5, 2012 and updated for the month of April 2012, along with their status.

Top 10 Project Risks

			RISK STATUS							
RISK NUMBER	RISK DESCRIPTION	RISK RATING	SINCE INCLUSIO	N ON TOP TEN ST	OVER PA	ST 30 DAYS				
			COST	SCHEDULE	COST	SCHEDULE				
R21	Additional Remote Monitoring of TPSS.	15	Increased	Increased	Unchanged	Unchanged				
C39	Construction issues (WFCY delayed construction which effects opening of the system).	12	Decreased	Decreased	Unchanged	Unchanged				
R23	Automatic Train Control (ATC) System Requirements per NTSB concerns and Other Systems Issues resulting from the Red line accident and NTSB safety report.	12	Unchanged	Unchanged	Unchanged	Unchanged				
M27	Delay in Vehicle (Rail Car) Delivery beyond the specified FFGA ROD date of December 1, 2014.	12	Unchanged	Unchanged	Unchanged	Unchanged				
C28	Completion of the installation of upgrade for the new (proposed) communication center at the Carmen Turner Building by WMATA to support integration testing to meet the Project ROD.	12	Unchanged	Unchanged	Unchanged	Unchanged				
C27	WMATA resource constraints delay system acceptance or operationa testing resulting in additional costs.	10	Decreased	Decreased	Decreased	Decreased				
C20	WMATA deliverables scope of work – including technical support and WMATA construction elements may exceed the budget and schedule	10	Unchanged	Unchanged	Unchanged	Unchanged				
D35	Incorporation of the Tysons - 123 Pavilion (Macerich) into the D/B Contract scope.	9	Unchanged	Unchanged	Unchanged	Unchanged				
D34	WMATA Delay in reviewing/approving DTP design documents.	9	Unchanged	Unchanged	Unchanged	Unchanged				
C21	Availability of track access for the Contractor to complete the K-Line connection work.	8	Unchanged	Unchanged	Unchanged	Unchanged				
	= Included in previous top 10 listing									

7. Action Items

MWAA – DULLES CORRIDOR METRORAIL PROJECT - Items for Grantee Action

PR	ITEM	IDENTIFICATION	NATURE of PROBLEM	D	A	I	COMMENTS	STATUS
2	2A.04	Update Procedures	Procedures need to	Y	Y	N	These Procedures in support of RCMP need to be	R
		PM5.01 (Processing	include Directive Letters				updated to include Directive Letters, Contingency	
		DB Changes) and	and Contingency				Drawdown and top management control of contingency.	
		PM5.07(Management	Drawdowns.				PM-5.07, Rev. 4 was submitted with RCMP Rev.3 and	
		of Project					accepted by the FTA. Revision to PM-5.01 remains	
		Contingency)					outstanding.	

KEY ITEM

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

LEGEND PRIORITY (PR) **GRANTEE ACTION** PMO CONTRACTOR STATUS

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

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

I – Action Implemented 3- Least Critical

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

APPENDICES

APPENDIX A – LIST OF ACRONYMS

AAC Agreement After Certificate

AMEP Architectural/Mechanical/Electrical/Plumbing ARRA American Reinvestment and Recovery Act

ASSHTO American Association of State Highway and Transportation Officials

BFMP Bus Fleet Management Plan CAR Corrective Action Request

CCC Construction/Procurement/Installation Conformance Checklist

CD Calendar Days

CNPA Concurrent Non-Project Activities

CPM Critical Path Method
CR Communications Room
CTI CTI Consultants, Inc.
CY Calendar Year

CY Calendar Year DB Design-Build

DCC Design Conformance Checklist

DCN Design Change Notice

DCR Dulles Connector Road

DF Direct Fixation

DGS (Virginia) Department of General Services
DIAAH Dulles International Airport Access Highway

DR Deficiency Report

DTP Dulles Transit Partners, LLC

DTR Dulles Toll Road

DVP Dominion Virginia Power
FFGA Full Funding Grant Agreement
FTA Federal Transit Administration

FTE Full Time Equivalent

FY Fiscal Year

HOT High Occupancy Toll
IFC Issued For Construction
IFP Issued for Proposal

IRR Issue Requiring Resolution

KSA, INC – Producer of Concrete Crossties

MH Manhole

MCI A communication company now owned by Verizon

MEP Mechanical, Electrical and Plumbing

MOT Maintenance of Traffic

MWAA Metropolitan Washington Airports Authority

NATM New Austrian Tunneling Method ORD Operational Readiness Date PDA Pile Driving Analysis

PDR Preliminary Design Review (7K Railcars)

PE Preliminary Engineering

PMOC Project Management Oversight Contractor

PMSS Project Management Support Services

PMP Project Management Plan

QA Quality Assurance
QC Quality Control
QPP Quality Program Plan

RAMP Real Estate Acquisition Management Plan RCMP Risk and Contingency Management Plan

RFC Request for Change

RFMP Rail Fleet Management Plan RMP Risk Management Plan ROD Revenue Operations Date

ROE Right-of-Entry ROW Right-of-Way

RSD Revenue Service Date (synonymous with Revenue Operations Date)

SAIC Scientific Applications International Corporation

SCC Standard Cost Category

SCIL Safety and Security Certifiable Items List

SOE Support of Excavation

SSCD Scheduled Substantial Completion Date SSMP Safety and Security Management Plan

SSWP Site Specific Work Plan

STP Surface Transportation Program

TBD To Be Determined

TOC Tri-state Oversight Committee
TPSS Traction Power Substation

UR Utility Relocation

VDOT Virginia Department of Transportation

W&OD Washington and Old Dominion

WFC West Falls Church WFCY West Falls Church Yard

WMATA Washington Metropolitan Area Transit Authority

XO Executive Officer

APPENDIX B -- PROJECT OVERVIEW AND MAP

Project Overview

Date: June 21, 2012 (reporting current through May 2012- Financials through April 2012)

Project Name: Dulles Corridor Metrorail Project – Extension to Wiehle Avenue

Grantee: Metropolitan Washington Airports Authority (MWAA)

FTA Regional Contact: Brian Glenn, P.E. FTA Headquarters Contact: Dale Wegner, P.E.

Scope

- **Description:** MWAA The Project is the initial 11.7-miles of the LPA, which will run from the current Metrorail Orange Line near the West Falls Church (WFC) station to Wiehle Avenue in Reston, providing direct service to the commercial and office center of Tysons Corner. The Project will be constructed in or parallel to the Dulles Connector Road, Routes 123 and 7 through Tysons Corner, and the Dulles International Airport Access Highway (DIAAH). It will include five new passenger stations, one 2,300-car parking facility (provided through a joint development agreement at Wiehle Avenue Station), improvements to the existing WFC Service and Inspection Yard, tail tracks outbound of the interim terminus station at Wiehle Avenue, and the procurement of 64 rail cars.
- **Guideway:** Phase 1 is approximately 11.7 miles in length consisting of two tracks.
- **Stations:** There are five stations in Phase 1. Each station will include a kiss-n-ride area; bus drop-off facilities; station platforms with benches, canopies, ticket vending machines; and other amenities.
- **Support Facilities:** There will be a modification to the West Falls Church Yard and service building. A tail track will be constructed beyond the Wiehle Avenue Station.
- **Vehicles:** The Project will include the purchase of sixty-four vehicles for Phase 1 that will be procured by WMATA.

Ridership

The Project is estimated to carry 69,700 average weekday riders during opening year.

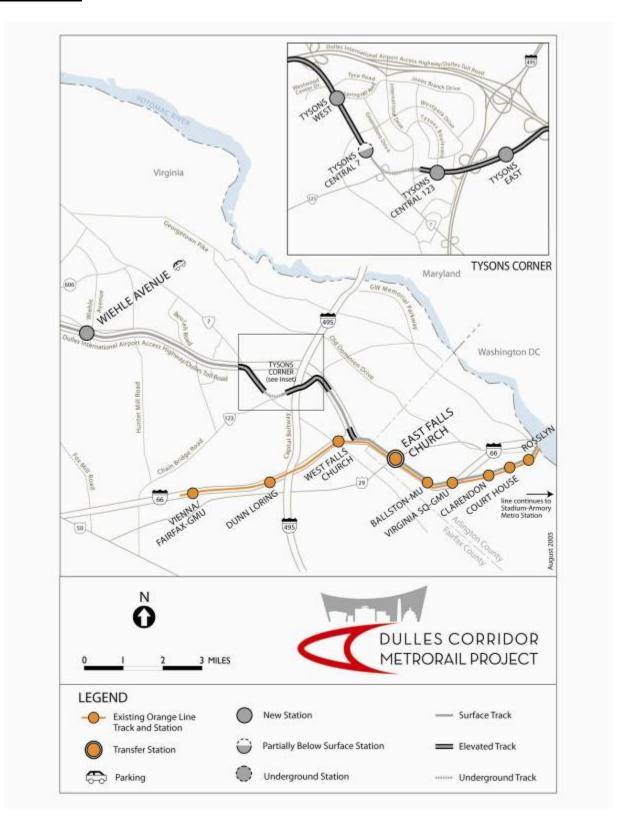
Schedule

06/10/04	Approval to Enter PE	2011	Estimated Rev Ops at Entry to PE	
05/12/08	Approval to Enter FD	12/04/13	Estimated Rev Ops at Entry to FD	
03/10/09	FFGA signed	12/01/14	Estimated Rev Ops at FFGA	
02/05/14	Revenue Service Date (RSD) as of April 25, 2012			
73.0%	Percent Complete Construction as of April 30, 2012.			
56.3%	Percent Complete Time based on RSD of December 1, 2014 (based on FFGA)			
74.0%	MWAA's Estimate of Project Earned Value through April 2012			

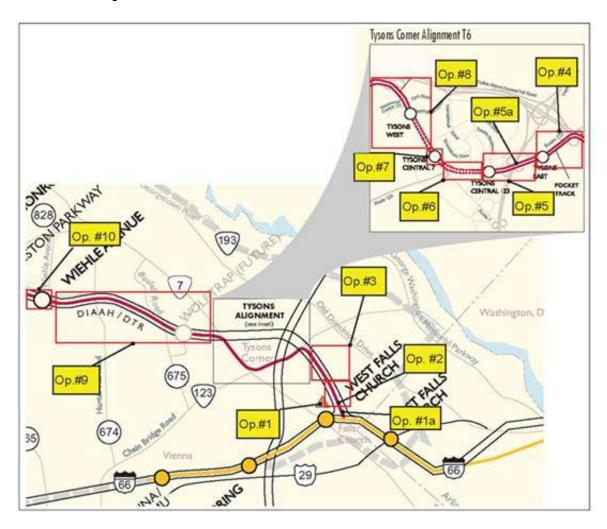
Cost

\$1.490 billion	Total Project Cost (\$YOE) at Approval to Enter PE
\$2.961 billion	Total Project Cost (\$YOE) at Approval to Enter Final Design
\$3.142 billion	Total Project Cost at date of report including \$510 million in Finance Costs
\$1.912 billion	Expenditures through <i>April 2012</i> from total project budget of \$3.142
billion.	
70%	Percent complete based on federal expenditures excluding contingency and
	finance charges through April 2012.
\$8.175 million	Total project contingency remaining (allocated and unallocated) through
	April 2012.

Project Map



Construction Operational Areas



APPENDIX C - MWAA SAFETY AND SECURITY CHECKLIST

Project Overview	Dulles Corridor Metrorail Project			
Project Mode (Rail, Bus, BRT, multimode)	Rail			
Project Phase (Preliminary Engineering, Design, Construction, or Start-up)	Design and Construction			
Project Delivery Method (Design/Build, Design/Build/Operate/Maintain, CMGG, etc)	Design/Build			
Project Plans	Version	Review By FTA	Status	
Safety and Security Management Plan	3/2012	4/2012	Accepted. MWAA's SSMP Rev.9 dated March 2012 was submitted for review in March 2012 and accepted by the FTA on April 13, 2012.	
Safety and Security Certification Plan			WMATA's SSCPP March 2012 Revision is included as Appendix E to MWAA's SSMP Revision 9, which was accepted by the FTA on April 13, 2012.	
System Safety Program Plan	1/20/2011		In response to FTA's Safety and Security Oversight Audit of TOC/WMATA and TOC Triennial Review findings, WMATA submitted an updated SSPP dated January 20, 2011, which was approved by TOC on February 22, 2011 with minor comments to be addressed in the next revision.	
System Security Plan or Security and Emergency Preparedness Plan (SEPP)			WMATA submitted a revised SEPP to TOC in March 2010. TOC approved the SEPP on August 2, 2010.	
Construction Safety and Security Plan			Addressed in PMP Version 8 which was submitted on May 1, 2012, which is under revision.	

Safety and Security Authority	Y/N	Notes/Status	
Is the grantee subject to 49 CFR Part 659 State Safety Oversight requirements?	Y	Tri-State Oversight Committee (TOC)	
Has the State designated an oversight agency as per Part 659.9?	Y	Tri-State Oversight Committee (TOC)	
Has the oversight agency reviewed and approved the grantee's SSPP as per 659.17?	N	An updated WMATA SSPP dated January 20, 2011 was approved by TOC on February 22, 2011.	
Has the oversight agency reviewed and approved the grantee's Security Plan or SEPP as per Part 659.21?	Y	Approved on August 2, 2010	
Did the oversight agency participate in the last Quarterly Program Review Meeting?	Y	TOC had a representative at the November 9, 2011 QPRM.	
Has the grantee submitted its safety certification plan to the oversight agency?	N	Plan in progress. TOC participates in monthly meetings.	
Has the grantee implemented security directives issues by the Department Homeland Security, Transportation Security Administration?	N	WMATA will be operator.	

SSMP Monitoring	Y/N	Notes/Status
Is the SSMP project-specific, clearly	Y	
demonstrating the scope of safety and security		
activities for this project?		
Grantee reviews the SSMP and related project	Y	
plans to determine if updates are necessary?		
Does the grantee implement a process through	N	WMATA will be operator.
which the Designated Function (DF) for Safety		_
and DF for Security are integrated into the overall		
project management team? Please specify.		
Does the grantee maintain a regularly scheduled	N	WMATA will be operator.
report on the status of safety and security		-
activities?		
Has the grantee established staffing requirements,	N	WMATA will be operator.
procedures and authority for safety and security		_
activities throughout all project phases?		
Does the grantee update the safety and security	N	WMATA will be operator.
responsibility matrix/organizational chart as		-
necessary?		
Has the grantee allocated sufficient resources to	N	WMATA will be operator.
oversee or carry out safety and security activities?		-
Has the grantee developed hazard and	Y	
vulnerability analysis techniques, including		
specific types of analysis to be performed during		
different project phases?		

Does the grantee implement regularly scheduled meetings to track to resolution any identified hazards and/or vulnerabilities?	Y	
Does the grantee monitor the progress of safety and security activities throughout all project phases? Please describe briefly.	Y	Design and Construction only. WMATA participates
Does the grantee ensure the conduct of preliminary hazard and vulnerability analyses? Please specify analyses conducted.	N	MWAA's letter of September 7, 2011 to WMATA indicated that they believed that such an evaluation is not required but that they would support WMATA if it chooses to conduct such an analysis.
Has the grantee ensured the development of safety design criteria?	Y	
Has the grantee ensured the development of security design criteria?	Y	
Has the grantee ensured conformance with safety and security requirements in design?	Y	
Has the grantee verified conformance with safety and security requirements in equipment and materials procurement?	Y	
Has the grantee verified construction specification conformance?	Y	
Has the grantee identified safety and security critical tests to be performed prior to passenger operations?	Y	In progress.
Has the grantee verified conformance with safety and security requirements during testing, inspection and start-up phases?	N	After SSCD
Does the grantee evaluated change orders, design waivers, or test variances for potential hazards and /or vulnerabilities?	Y	
Has the grantee ensured the performance of safety and security analyses for proposed work-arounds?	Y	
Has the grantee 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	In progress with WMATA.
Has the grantee issued final safety and security certification?	N	
Has the grantee issued the final safety and security verification report?	N	

Construction Safety	Y/N	Notes/Status
Does the grantee have a	Y	
documented/implemented Contractor Safety		
Program with which it expects contractors to		
comply?		
Does the grantee's contractor(s) have a	Y	DTP's Construction Safety, Health and
documented company-wide safety and security		Security Plan accepted on January 6,
program plan?		2009.
Does the grantee's contractor(s) have a site-	Y	
specific safety and security program plan?		
Provide the grantee's OSHA statistics compared	Y	DTP has recorded 327 first aid cases
to the national average for the same type of work.		and six lost time cases in 10.308
If the comparison is not favorable, what actions		million project man-hours which is
are being taken by the grantee to improve its		below the national average.
safety record?		
Does the grantee conduct site audits of the	Y	
contractor's performance versus required		
safety/security procedures?		

Federal Railroad Administration	Y/N	Notes/Status
If shared track: has grantee submitted its waiver request application to FRA? (Please identify specific regulations for which waivers are being requested)	N/A	Heavy Rail Transit Project. No FRA involvement.
If shared corridor: has grantee specified specific measures to address shared corridor safety concerns?	N/A	
Is the Collision Hazard Analysis underway?	N/A	
Other FRA required Hazard Analysis – Fencing, etc.?	N/A	
Does the project have Quiet Zones?	N/A	
Does FRA attend the Quarterly Review Meetings?	N/A	

APPENDIX D – PMOC TEAM PERFORMING THIS REVIEW

