COMPREHENSIVE MONTHLY REPORT

July 2010

Dulles Corridor Metrorail Project Extension to Wiehle Avenue

Metropolitan Washington Airports Authority Washington, DC

August 31, 2010

PMOC Contract Number: DTFT60-09-D-00016

Task Order Number: 002, Project Number: DC-27-5142, Work Order NO. 01

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: 9.5 years

Length of Time PMOC Lead Assigned to Project: 2.6 years

EXECUTIVE SUMMARY

The Project Management Oversight Contractor (PMOC) met with Metropolitan Washington Airports Authority (MWAA) staff on August 4, 2010 to conduct a monthly progress meeting for work performed in July 2010. The full time on-site PMOC attended various project meetings throughout this reporting period and toured the construction site on a regular basis. The PMOC participated with MWAA and FTA representatives in a complete field tour of the Project on the morning of August 4, 2010 and PMOC representatives also participated in a Systems Design Status Meeting the morning of August 4, 2010. 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 Operations Date (ROD) is December 1, 2014. The Federal New Starts share is \$900 million for the Initial Operating Segment (extension to Wiehle Avenue). Through Federal fiscal year (FY) 2009, Congress has appropriated \$279 million in Section 5309 New Starts funds and \$77.3 million in American Reinvestment and Recovery Act (ARRA) Capital Investment funds.

The Project Map is located in Appendix B.

2. Project Status Summary

The PMOC met with MWAA on August 4, 2010 to conduct a monthly progress review meeting.

- **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 moved forward with the July 27, 2010 contract award by WMATA to Kawasaki. 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). NTP is now expected to occur in mid-August.

Design progress continues to lag behind the baseline schedule but currently does not affect construction progress. Final Design of the stations was originally anticipated to be completed by the end of the third quarter of 2009. Final design of the station structures has been completed and submitted for review and coordination. Agency reviews and the incorporation of all comments continue, along with subsequent permitting by VDOT and DGS. This design excludes the access pavilions and final bridge alignments at the stations that are subject to coordination with adjacent developers. Anticipated overall design completion of the five stations through "Issued for Construction" (IFC) drawings including pavilions has again been bumped from the third quarter of 2010 to the fourth quarter of 2010 for civil work and the fourth quarter of 2011 for systems work. Overall project design is at 93% complete as of the end of July 2010. The project design does not appear to have adversely impacted the schedule's critical path at this point in time. This is due to the DGS permitting of prioritized segments of the design packages. MWAA provided the PMOC with the impact on cost contingency as a result of overdue IFP and IFC station designs. The PMOC will review and comment on this submission. MWAA reported that property owners adjacent to the station sites are requesting modifications to the design.

It was reported during the August 4 monthly update meeting that WMATA had sent a letter to MWAA indicating they would not progress further ATC reviews until Alstom provides documentation that they have complied with the two NTSB recommendations directed to Alstom related to the WMATA collision on June 22, 2009. The Airports Authority has notified DTP of WMATA's requirements and directed them to obtain the necessary information from their subcontractor, Alstom. Impact on the project schedule is not yet known. For many months, WMATA has failed to respond to numerous requests to review and comment on the ongoing Project ATC design. The reason given was always lack of resources. Now WMATA has the resources and a better effort by WMATA could be made now to progress the ATC design.

• Construction progress is broken into two components: utility relocation, which is 95% complete and design-build (DB) construction, which is approximately 18% complete. There are six remaining utility companies that are forecast to complete their work in mid August 2010. The east-bound Route 7 road shift to accommodate the Central 7 Station construction was accomplished on June 5, 2010. The west-bound Route 7 road shift to accommodate the Tysons Central 7 Station construction occurred on July 23, 2010. The most recent schedule with a data date of July 25, 2010 (not yet analyzed) indicates that there will be three separate traffic detours to accommodate the Tysons West Station construction. The first is scheduled to occur on August 28, 2010, the second and third to occur on September 10 and 23, 2010, respectively.

The O-1 Guideway is approximately 69% complete. The Tysons East Guideway/Station is approximately 46% complete and the NATM Tunnel is approximately 40% complete with the contractor completing 1,218 of 1,670 feet for the Outbound (OB) track and 957 of 1,686 feet for the Inbound (IB) track. Tysons East Station is approximately 13% complete and Tysons Central 123 Station is approximately 11% complete. The Wiehle Avenue Station is approximately 15% complete. The pre-cast yard is now 100% constructed, and has cast 890 of 2,600 concrete box girders segments to date. The casting of station guideway segments in

the long line casting yard continues and the assembly of balanced cantilever box girder molds has been completed and one cantilever box girder was cast.

• The Schedule showed a 2 calendar day loss with the most current analyzed update schedule (data date of June 25, 2010) showing a total -92 calendar days (-90 in the May update) variance from the approved baseline schedule. This results in a projected ROD of March 6, 2014. DTP's July schedule update, which has not yet been analyzed, reflects a total -91 calendar days delay. MWAA continues to note that it does not agree with the critical paths presented by DTP as being reflective of the actual critical path of the Project. MWAA directed DTP to resubmit the June 25th schedule update to reflect MWAA's comments relative to the critical path. MWAA and DTP met several times during the month of July to review DTP's recovery schedule, which was finalized and submitted to MWAA on July 26, 2010 with a request for Change RFC-112 Rev. 0 entitled "Design-Build Acceleration for Delays through June 25, 2010." RFC-112 provides a recovery schedule intended to mitigate ninety-one (91) days of delay to the forecast Project Substantial Completion. The RFC includes an acceleration cost of \$23.7M. MWAA is reviewing the RFC.

It remains the PMOC's opinion that recovery of the reported schedule losses, is within the Project's ability via work-arounds, schedule adjustments and schedule compression. It is becoming apparent that if the Project wants to maintain the December 2013 ROD, a decision to recover any excusable delays will likely require a directed acceleration. Therefore, it is the PMOC's opinion that MWAA should be fast tracking a Time Impact Analysis/Cost Benefit Analysis in order to make an informed decision at the earliest possible date. Failure to provide a timely response may result in a costly constructive acceleration whether it's wanted by MWAA or not.

The Contract Completion Date is not considered to be in serious jeopardy at this time. The Project will need to continue its efforts to resolve disagreements relative to the West Falls Church Yard (WFCY), critical path, logic and delay issues in order to minimize the risk of irretrievable schedule creep leading to costly schedule compression or *at least to minimize constructive acceleration costs*. It is the PMOC's opinion that the majority of the UR work and design related permit issues will be resolved within the next several months and that schedule recovery will progress during the third and fourth quarters of 2010. Whether or not sufficient recovery can be gained before winter time without a directed acceleration remains to be seen.

• **Budget** status as of June 25, 2010 indicates that \$736,086,123 (23%) has been expended of the \$3,142,471,634 budget total. MWAA reports \$70,998,644 of the available contingency for the first three contingency milestones has been utilized with a remaining balance of \$68,001,356 available through the completion of stations design and utility relocation work which are expected to be completed by December 2010 and August 2010, respectively. The PMOC does not agree that the Phase 2 contingency milestone has been achieved, and has reviewed MWAA's draft justification paper dated April 20, 2010, which was presented at the May 6th meeting. The PMOC reported during the June 3, 2010 update meeting that its position remains unchanged since the justification addresses only schedule and not cost. MWAA provided the FTA and PMOC with a white paper documenting why MWAA

believes that both Phase 2 schedule and cost contingency have been completed. The *PMOC* has again informed MWAA that its position remains unchanged, in part due to lack of information on the cost contingency. MWAA's estimate of the earned value for the Project through *June* 2010 is 36.69%.

3. PMOC's Assessment of Project Status

The PMOC continues to observe delays in the design development particularly with regard to station design and now with the systems designs. To date, this has had no known impact on the critical path because of the work-around efforts in the field and the division of design packages resulting in prioritized permitting by DGS. However, some of the late design packages are continuing to accumulate negative float on the *June 25th* schedule *update*. The impact on cost contingency for the complete station design and utility completion milestones has not been determined. MWAA continues to meet with DGS, VDOT, WMATA and DTP to coordinate and resolve the design and design review issues. MWAA's ongoing efforts are yielding progress. However, MWAA and DTP continue to voice concerns with the lengthy review cycles by WMATA, VDOT and DGS. *MWAA is also concerned about the poor quality control of DTP's documents*.

Utility relocation continues with utility companies striving to meet the requirements of the Project. Efforts to recover lost time caused by inclement weather and unforeseen obstacles continue along the Route 7 corridor utilizing extra shifts, weekend work and other mitigation efforts. Completion of utility relocation work continues to be critical to the project's three upcoming Route 7 road shifts in the Tysons West Station area. The remaining utility companies are expected to complete in mid August 2010. The civil contractor and the utility contractors continue to meet on a weekly basis to coordinate their efforts and priorities needed to support the upcoming roadway shifts. This has resulted in limiting the schedule impacts of the UR delays by allowing critical work to proceed sooner. However, it has also resulted in work areas that are smaller and are likely to cause construction inefficiencies in the months to come.

The Full Time Equivalent (FTE) total for *July* is 1,588, which is an increase from *June* of 77 and appears to provide suitable support to the scheduled activities. The pre-casting facility continues to produce pre-cast concrete girder segments and long line station segments in advance of their erection schedule. The New Austrian Tunneling Method (NATM) tunneling is ahead of schedule.

The Pier 7 IB PDA testing was successfully completed on April 14, 2010. PDA/static load tests were successfully conducted on piers 1-IB, 6-IB, 5A-OB and 4-IB during the May 29, 2010 weekend Orange Line track outage. Successful PDA tests were conducted on 2-OB, 3-OB and 2-IB during the June 5, 2010 weekend Orange Line track outage. The eighth and final PDA test was successfully conducted on pier 5-IB on June 12, 2010. The 2 remaining static load tests were successfully completed on pier 5B-OB and 3-IB on June 16 and 25, 2010, respectively. This concluded the load tests on all eleven existing pier foundations. The peripheral tests, i.e. soils, metallurgical, stray current, corrosion and concrete tests were completed in the field and laboratory during the months of June and July. DTP submitted its comprehensive report to MWAA on July 20, 2010. CTI, the special inspections consultant, will submit an independent

test report for the existing foundations to MWAA on August 16, 2010. MWAA and CTI will be conducting an audit of DTP's design calculations and related test data on September 15, 2010 to ensure that the test data supports the design requirements. The PMOC will review both reports.

DTP has submitted a test plan for use of existing piles at the Difficult Run Bridge and the plan was submitted to WMATA and VDOT. The Project team has reviewed and "Accepted as Noted" the plan. The plan is similar to the one for testing the existing piers at the O-1 Guideway. These tests will also be witnessed by CTI in the same manner as for the O-1 Guideway tests. The SCIL has been revised to include the witnessing of the tests by CTI and the conduct of the QA audit of DTP engineering by the Project team to verify proper inclusion of the test results into the final design for the O-1 Guideway piers and the Difficult Run Bridge Abutment. Unlike the O-1 Guideway piers, DTP has obtained the "as-built" drawings for the piles to be re-used.

The PMOC has requested that MWAA update and submit the PMP. This update is months overdue. MWAA has revised their submission date to August 2010.

TABLE OF CONTENTS

EXE	CUTIVE SUMMARY	I
1.	PROJECT DESCRIPTION	
2.	PROJECT STATUS SUMMARY	
3.	PMOC'S ASSESSMENT OF PROJECT STATUS	
1.	GRANTEE'S CAPABILITIES AND APPROACH	1
a.	Technical Capacity and Capability	<i>1</i>
b.	Project Controls	1
c.	Compliance	2
2.	PROJECT SCOPE	2
a.	G	
b.	Bidding and Construction Status	3
c.	Third Party Coordination & Agreement Status	5
d.	Real Estate	5
e.	Utility Coordination	5
f.	Vehicle Procurement	
g.		
3.	PROJECT MANAGEMENT PLAN AND SUB-PLANS	9
4.	PROJECT SCHEDULE	10
a.	Critical Path Evaluation	12
b.	Important Activities – 90 Day Look Ahead	14
5.	PROJECT COST	14
a.	Explanation of Variances	14
b.	Monthly Cost Report - June 2010	16
c.	Project Funding Sources: June 2010	17
6.	Project Risks	
7.	ACTION ITEMS	22
APP	ENDICES	24
A	PPENDIX A – LIST OF ACRONYMS	25
A	PPENDIX B – PROJECT OVER VIEW AND MAP	27
A	PPENDIX C – SAFETY AND SECURITY CHECKLIST	28
A	PPENDIX D – PMOC TEAM PERFORMING THIS REVIEW	29

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.

• Project Staffing

All vacancies have been filled as of March 2010.

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 updated project schedule, with a data date of *July* 25, 2010 (not yet analyzed), reflects a -91 calendar day variance with the contractor's baseline schedule with a Revenue Operations Date (ROD) of December 4, 2013. The current variance would result in a ROD of *March* 5, 2014. It is the PMOC's observation that MWAA continues to carefully scrutinize the schedule update submissions and meets with the contractor within two weeks of the schedule submission to discuss their observations and to discuss mitigation strategies with DTP. MWAA and DTP met several times during the month of July to review DTP's recovery schedule, which was finalized and submitted to MWAA on July 26, 2010 with a Request for Change RFC-112 Rev. 0 entitled "Design-Build Acceleration for Delays through June 25, 2010." RFC-112 provides a recovery schedule intended to mitigate ninety-one (91) days of delay to the forecast Project Substantial Completion. The RFC includes an acceleration cost of \$23.7M. This RFC is under review by MWAA. The FFGA ROD is December 1, 2014.

MWAA continues to monitor expenditures to date and update the estimate at completion. To date, MWAA has utilized \$70,998,644 of the Phase 1 and Phase 2 *allotted* contingency of \$99,000,000. Although MWAA has indicated that the project has progressed to the Phase 3 level of contingency, the PMOC does not agree. At the May 6, 2010, update meeting with

MWAA, the Authority presented a justification for moving to the Phase 3 level of contingency. The PMOC reviewed the justification and reported at the June 3, 2010 update meeting that there was still disagreement since the justification addresses only schedule and not cost. MWAA revised the white paper to include a discussion of cost. *The PMOC and MWAA will discuss this further at the next monthly meeting*.

The Quality Assurance (QA)/Safety group maintains an active schedule of audits and surveillances and accident data. Through *July 2010*, of the cumulative total of hours worked of 3,263,987 there have been no lost time events. The required sign-offs on the "System Safety/Security Certifiable Items List" (SCIL) *have been problematic*. However, a meeting held between MWAA and DTP to address these problems and a path forward was conducted on May 25, 2010. *DTP personnel responsible for checklist sign-offs are being retrained*. Revision 2 of the SCIL was distributed for review and comment on March 15, 2010. Comments were received from WMATA in May and combined with MWAA's comments that were forwarded to DTP for action on May 24, 2010. DTP will issue Revision 3 in *August* which MWAA expects will lead to the approval of the base SCIL.

MWAA continues to monitor the risk status and reports this information on a monthly basis.

c. Compliance

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

MWAA submitted the required Record of Decision Mitigation Report to the FTA on July 29, 2010 for the second quarter of CY 2010.

FTA and the PMOC continue to review the May 19, 2010 submittal on proposed changes to Record of Decision mitigation measures at the Wiehle Avenue Station, primarily due to the joint development project proposed for that location.

2. Project Scope

a. Design Status

Work continues on the completion of designs, with stations' designs continuing to lag. The problems with regard to stations design are due to a combination of poor quality control of the documents and cumbersome review processes and the lack of resources by reviewing agencies. MWAA and DTP continue to meet with the various permitting agencies in an effort to improve the processes. MWAA continues to stress to DTP the need for better quality assurance reviews of their submissions and is reviewing DTP's submissions before submitting them to the permitting agencies. MWAA reports that the quality of the DTP package submissions is improving, but some packages are still being returned for corrective action. Efforts are also continuing by VDOT and WMATA to improve their design review cycle times. Overall, basic design for all five stations is reported as complete. However, the "Issued for Permit" (IFP) and subsequent "Issued for Construction" (IFC) drawings are proving to be a drawn out process. Anticipated issuance dates for IFC design packages continue to change from month to month. As of August 1, 2010, the completion dates for all station-related design packages are: November 2010 for Tysons East, Tysons Central 123

and Wiehle Avenue Stations and *December 2010 for Tysons Central 7 and Tysons West Stations*. According to DTP, *issuance* of completed IFC design packages has not impacted the project's critical path, due in part to DGS continuing to assist with the permitting of partial packages. However, various design packages continue to accumulate negative float on the Project schedule. The impact on cost contingency for the complete station design milestone has not been determined.

b. Bidding and Construction Status

Through *June 2010*, \$231,250,355 *of* the \$437,278,511 Federal Allowance Items Budget had been awarded to subcontractors and suppliers. An \$11,870,978 overrun now exists for the *13 of 31 sub-contract packages* awarded thus far for federally funded allowance items.

Utility relocation is 95% complete and DB construction is approximately 18% complete. Utility companies continue to relocate their facilities into the duct banks and facilities installed by MWAA's utility contractor and to remove overhead cable lines. Efforts to recover lost time caused by inclement weather and unforeseen obstacles continue along the Route 7 corridor with extra shifts and weekend work. Six utility companies continue striving to meet the requirements of the Project. Completion of utility relocation work remains critical to the project's plans to shift the Route 7 roadway to support construction starts at Tysons Central 7 and Tysons West Station areas. Utility relocation along Route 7 is now forecast to be complete in August with Level 3 scheduled to complete on August 13, 2010.

• The west-bound Route 7 road shift to accommodate the Central Tysons 7 Station construction was accomplished on July 23, 2010. Three additional traffic detours to accommodate the Tysons West Station construction are planned. The first is scheduled to occur on August 28, 2010, the second and third to occur on September 10 and 23, 2010, respectively. The civil contractor and the utility contractors meet on a weekly basis to coordinate their efforts and the priorities needed to support the remaining west-bound road shift.

The following are the major accomplishments of the DB contractor during July 2010:

- Operations Areas OP-1, OP-2 and OP-3 (I-66/DCR/Laydown Area 1) Completed pouring the walls at abutment A-IB. Poured pile caps at pier 2-IB, 6-IB and 3-OB bringing the total to fourteen complete to date. Poured guideway pier columns at piers 1-IB, 2-IB, 3-IB, 3-OB, 4-OB and 5A-OB bringing the total to thirty-five completed to date. Poured guideway pier caps at piers 1A-OB, 1-OB, 5A-OB, 1-IB and 3-IB bringing the total to thirty-three completed to date. AASHTO girders were set in place at span 12-OB and 13-OB. Steel guideway girders were set at spans 8-OB and 9-OB. Grouting of bearing pads continues. Continued with pouring bridge decking at the Magarity Road Bridge and completed abutment A at the Pimmit Run Bridge. Also continued storm drain installation west of Magarity Road and continued pouring retaining walls west of Pimmit Run.
- Operations Area OP-4 (Tysons East Guideway/Station) Traffic pattern MOT was implemented at Route 123 and 267 for construction of pier 15. Completed caissons at piers 27-IB, 27-OB, 33-IB, 34-IB, 35-IB, 38-IB/OB, 42-OB, 43-OB, 60-IB and 62-OB bringing the total to seventy-three completed to date. Completed pile caps at

piers 25, 43-IB, 44-IB/OB and 47-IB/OB bringing the total to forty-five completed to date. Poured pier columns at piers 15-OB, 16-IB/OB, 25-IB/OB, 33-OB and 47-IB/OB bringing the total to thirty-nine completed to date. Poured pier caps at piers 16-IB/OB, 17-IB/OB, 24-IB/OB, 55-IB/OB, 56-IB/OB and 57-IB/OB bringing the total to twenty-three completed to date. Placed mezzanine beams at Tysons East Station piers 30-IB/OB and 31-IB/OB. Completed segmental box girder guideway erection of spans 3-IB and continued with span 3-OB. Completed construction of post tensioned straddle bents at piers 7-IB/OB and 8-IB/OB and continued formwork for straddle bent at pier 10-IB/OB.

- Operations Area 5A (I-495 Crossing/Tysons Central 123 Station) Completed caissons at piers 51-IB/OB, 71-IB and 71-OB bringing the total to twenty completed to date. Completed pile caps at piers 49-IB/OB, 63-OB, 63-IB, 68-OB, 68-IB, 69-OB, 69-IB bringing the total to fifteen completed to date. Completed columns at piers 63-OB, 63-IB, 64-OB, 64-IB, 65-OB, 65-IB, 68-OB, 68-IB, 69-OB, and 69-IB bringing the total to eighteen completed to date. Drilled elevator casings at Tysons Central 123 Station.
- Operations Area OP-6 (Laydown Area #6/NATM Tunnel/East Cut & Cover and Ventilation Structure) DTP continued excavation of the OB tunnel completing 1,218 feet of 1,670 feet to date and the excavation of the IB tunnel completing 957 feet of 1,686 feet to date.
- Operations Area OP-6 (West Cut and Cover Tunnel) Completed the stage 1B OB box structure and began backfilling operations and completed pouring the IB walls and roof sections at stage 1B.
- Operations Area OP-7 (Tysons Central 7 Station) Installation of the support of excavation for the station continues.
- Operations Area OP-8 (Tysons West Station/Guideway) Storm drain, grading and curb and gutter work for the next eastbound road shift between Westwood Center Drive and the Best Buy store continues. Construction of retaining wall and storm drain installation continues between Westwood Center Drive and the Toll Road. Storm drain, grading and curb and gutter work on west bound Route 7 continues between Spring Hill Road and Tyco Road. Grading work continues on west bound Route 7 between Westpark Drive and SAIC. West bound Route 7 was shifted north between Frontage Road and SAIC.
- Operations Area OP-9 (DIAAH) Construction of abutment pile cap and walls continues at abutment B of the W&OD Bridge. Continue abutment B wall construction on the west side of the Hunter Mill Road Bridge. Continue with H-pile installation for abutment A on the east side of the Hunter Mill Road Bridge. Completed installation of SOE and excavation at the abutments for Difficult Run Bridge. Continue with the retaining wall construction on the OB and IB sides between the W&OD and Difficult Run Bridges. Continue storm drain installation between Hunter Mill Road and Difficult Run.

- Operations Area OP-10 (Wiehle Avenue Station/Laydown Area 13) Continue forming and pouring platform walls and the platform slab. Continue pile cap construction on the IB track side of the station. Continue pouring slab on grade under the station platform and continue installation of the underground sanitary sewer and water lines. Completed the first phase of the westbound DIAAH road shift to facilitate installation of waterlines and construction of the outside pile caps on the north side of the track way. Continue grading work and permanent barrier rail on the westbound DIAAH median side for the second phase of the road shift. Continue jack and bore for the waterline on the westbound toll road.
- Laydown Area #10 (Pre-cast Yard) Continue casting of segmental box girders with a total of 890 completed to date. Implemented the molds for the balanced cantilever box girders and cast the first of these segments in July.

c. Third Party Coordination & Agreement Status

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

d. Real Estate

Real Estate Acquisition continues to keep ahead of construction requirements, often resorting to ROE to gain access to required parcels. Through *July* 2010, *61* of the 99 parcels required for the Project have been acquired. The table below summarizes acquisition activities for the Project through *July* 2010.

PARCELS ACQUIRED¹

(Number of parcel packages)

			Period	To Date				
LOCATIONS	TOTAL	Planned ²	Actual	Var	Planned ²	Actual	Var	
Route 66 / Dulles Connector	1	0	0	0	1	1	0	
Route 123	23	1	0	(1)	20	19	(1)	
Route 7	51	1	0	(1)	42	34	(8)	
DIAAH	24	2	1	(1)	9	7	(2)	
TOTAL	99	4	1	(3)	72	61	(11)	

Notes: 1. Parcels secured through recordation of deed/easement and filing of Certificates of Take. These values include rights obtained for another 28 parcels for which Certificates of Take have been filed.

2. Planned values are based on the March 31, 2010 Property Acquisition Status Update.

e. Utility Coordination

The various utility companies continue to relocate their facilities for the project. Utility coordination meetings are held with the various utilities to schedule and coordinate work. Specific utility relocation work completed in *July* 2010 includes the following:

• Along Route 7 (123 Overpass to Marshall's) – Dominion continues setting poles and pulling cables at Phase 5 on the north side of Route 7. DTP/Lane continues with street restoration on the Frontage Road on the north side of Route 7.

- Along Route 7 (Marshall's to Gosnell/Westpark) MCI continues cutover of customers at SAIC. AT&T Long Distance completed cable splicing and removal of cables between SAIC and Verizon manhole VZN-507 in the right lane of Route 7. Dominion continues pulling and splicing cables at Phase 5 on the north side of Route 7.
- Along Route 7 (Gosnell/Westpark to Spring Hill Road) Verizon completed cutovers of service and removal of overhead lines in Segment 4 between Spring Hill Road and Westpark Drive. Dominion continues splicing and cutovers at Phase 4 on the north side of Route 7.
- Along Route 7 (Spring Hill Road to Tyco/Westwood) Cox Communications completed overhead line removals on the south side of Route 7. MCI continues splicing and cutovers on the north side of Route 7 and Verizon completed splicing and cutovers on the south side of Route 7. Verizon continues rewiring and cutovers on traffic signal controllers on the North side of Route 7 in front of the Cherner Dealership. Dominion completed removal of overhead lines on the south side of Route 7 and AboveNet continues pulling cables and splicing on the south side of Route 7 on facilities that are not in conflict with Design Build roadwork.
- Along Route 7 (Tyco/Westwood to Route 267/Toll Road) Verizon completed splicing and cutovers on the north side of Route 7 as part of Segment 4. AboveNet continues with customer notifications and splicing cutovers on the North side of Route 7. Dominion completed removal of overhead lines on the south side of Route 7 and MCI continues with customer notifications and splicing work. Level 3 completed installation of fiber cables at the north side of Route 7 and continues with customer notifications for cutovers. Fiberlight continues splicing and cutovers on the north side of Route 7.
- Along Route 123 (Route 7 to the Route 267 Connector Road) DTP/Lane continues with bypass 34.5kV manhole and ductbank installation near the Tysons Central 123 Station. AboveNet continues digging test pits at Route 123 and Scotts Crossing. DVP completed cable pulling tie-ins in ductbanks at Scotts Crossing/Colshire Drive and continues with splicing work. Quest Government continued lowering ducts at the Tysons Central 123 Station slab area.
- The DIAAH/Dulles Toll Road (Route 7 to Route 267 DIAAH West) DTP/Lane completed grouting conduits at jack and bore crossing #158 at Traction Power Substation (TPSS) #8 on the eastbound Toll Road. DTP/Lane also completed grouting conduits at jack and bore crossing #156 at the westbound Toll Road just west of Hunter Mill Road for TPSS #10. All jack and bore traction power crossings are now complete on the DIAAH. DTP/Lane continues with the traction power ductbank installation at the median between the eastbound Toll Road and the DIAAH between Difficult Run and Hunter Mill Road. They also completed the installation of traction power ductbank and manholes on the westbound DIAAH between Wiehle Avenue and the end of the tail tracks and completed jack and bore crossing #165 on the DCR near the West Falls Church Station and continued on crossing #162 at TPSS #2.

f. Vehicle Procurement

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

Rail car Procurement moved forward with the July 27, 2010 contract award by WMATA to Kawasaki. 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). NTP is now expected to occur in mid-August. The Project schedule requires the last (64th) car to be delivered by September 20, 2013 to support the Operational Readiness Date (ORD). A revised delivery schedule is not yet available. WMATA has stated that they will be able to support the Project's ORD needs with existing fleet cars if the car supplier is unable to improve the delivery schedule.

g. Safety and Quality Status

The Airports Authority participated in *four* safety walk downs with DTP during the month of *July*. *One was* related to utility relocation and *three* were related to Design-Build work. *An audit of the DTP Construction Safety Program is scheduled for August 4-5, 2010*. As of July 31, 2010, DTP had logged a total of 3.26 million project manhours with 103 first aid cases and no lost time cases. There have been a total of 142 incident investigation reports, 72 utility hits and 15 vehicular accidents.

Revision 2 of the SCIL was distributed for review to the Airports Authority and WMATA on March 16, 2010 with a comment response request date of April 9, 2010. Airports Authority comments were transmitted to DTP on May 24, 2010 and included informal comments received from WMATA's System Safety and Security Department. Revision 3 is scheduled to be received in *August* and the Airports Authority anticipates accepting this revision.

DTP has struggled with its 90-day Design Conformance Checklist submissions since September 2009. DTP's first two 90-day submittals of completed design conformance checklist items repeatedly failed the MWAA review and approval process after several resubmission cycles.

On May 25, 2010, the Airports Authority and DTP management met to discuss unacceptable issues that had resulted in the rejection of the first two Design Conformance Checklist submittals. DTP presented a plan for addressing these issues and for proceeding in a timely manner with the sign-off of items in the Checklist. Beginning June 8, 2010, DTP and the Airports Authority meet every two weeks to review the status of issued for construction designs (including subcontractor designs) and determine the status of sign-offs of the design Conformance Checklist items related to all issued for construction designs. DTP engineering personnel responsible for Checklist sign-offs have been re-trained to ensure correction of previously identified problems. During the

initial DTP/Airports Authority meetings, it was agreed that the next Design Conformance Checklist submittal would be scheduled for September 2, 2010 and that the next Construction/Procurement/Installation Conformance Checklist would be submitted on October 4, 2010.

The Project team has conducted a review of all 386 items in the first two populations. A total of 163 items from the first two submittals have now been accepted by the Airports Authority. The remaining unaccepted items are being re-reviewed by DTP. The items that can be signed off will be included in DTP's third Design Conformance Checklist submission in September.

WMATA *is* implementing a procedure that involves potential selection of additional items from a checklist population for Airports Authority review in addition to those chosen randomly by the Project team for review. These items will be safety critical items selected on a "judgment" basis by WMATA Safety. That process will likely commence with DTP's September checklist submission. The Tri-State Oversight (TOC) and the FTA's on-site PMO representative continue to meet monthly with the Safety/Security Certification Working Group and continue ongoing involvement in the certification process.

MWAA's QA group continues to monitor DTP's quality program and maintains a schedule of audits and surveillances. In addition, MWAA continues to perform safety walkdowns with DTP.

During July 2010 MWAA performed the following QA audits/surveillances:

- Welding Bearings: A survey of subject activities was conducted on July 7, 2010. There were two issues noted and a response was due July 26, 2010.
- Project QA Program: An audit was conducted on the subject program on July 21 and 22, 2010. There was one observation issued. A report is currently being prepared.
- Facchina Construction: A joint MWAA/DTP audit was conducted on July 28 and 29, 2010. Findings and a report and being prepared.

The MWAA QA Audit and Surveillance Schedule through September 2010

Tentative Date	Audit (A) Surveillance (S)	Organization/Activity	Joint Audit/ Surv.	Lead
TBD	A	J.P. Concepts/Progress Rail Services (Rail) (Steelton, PA)	Y	DTP
TBD	A	Progress Rail Services (Covington, KY)/KSA (Portsmouth, OH)	Y	DTP
8/04-05/10	A	DTP Construction Safety Program	N	MWAA

Tentative Date	Audit (A) Surveillance (S)	Organization/Activity	Joint Audit/ Surv.	Lead
8/04/10	S	DTP Subcontractor/Supplier Submittal Process: DTP/Subcontractors Nonconformance Control Systems	Y	MWAA
8/11-12/10	A	Brayman Construction	Y	DTP
8/18-19/10	A	Lane Construction (Early MEP)	Y	DTP
8/25-26/10	A	DTP Acquisitions	Y	MWAA
9/8-9/10	A	DTP Environmental	N	MWAA
9/8-9/10	A	CTI QA Program	N	MWAA
9/15/10	S	DTP Subcontractor/Supplier Submittal Process: DTP/Subcontractors Nonconformance Control Systems	N	MWAA
9/15-16/10	A	DTP Design of Piers 1-IB, 2-IB, 3-IB, 4-IB, 5-IB, 6-IB, 7-IB, 2-OB, 3-OB, 5A-OB, and 5B-OB	N	MWAA/CTI
9/22-23/10	A	DTP Construction and QC	N	MWAA

3. Project Management Plan and Sub-plans

- MWAA's Project Management Plan (PMP), Version 6.0 dated September 26, 2008 has been accepted by the FTA. The PMOC did a review of MWAA's compliance with the PMP and issued a Spot Report on December 8, 2009. MWAA is in the process of updating the PMP based on the PMOC's observations and the recent MWAA reorganization to an integrated MWAA and PMSS organization. MWAA anticipates completing the PMP update in *August* 2010. The PMOC's various compliance reviews performed during 2009 have found MWAA to be in compliance with their various project plans and sub-plans.
- MWAA's Quality Program Plan (QPP), Revision 6, dated June 25, 2008 was accepted by the FTA on September 19, 2008. MWAA submitted a revised QPP, Revision 7 to FTA on January 7, 2010. MWAA awaits FTA's comments on the revised plan or an indication that no comments will be forthcoming. MWAA reported that three Project Management Procedures were updated in the period from March through May 2010.
- 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) and has requested DTP to revise their Procedure PIQ-5.1.

- MWAA's Risk Management Plan (RMP) dated October 2008 has been reviewed and accepted by the FTA. The PMOC requested MWAA to begin the process to update the RMP by the end of the summer with a meeting to discuss the update to be scheduled in September 2010.
- 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 has updated the RFMP to reflect the 7000 Series Cars' quad concept and has 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 provided comments to WMATA on March 15, 2010 based on the PMOC's Spot Report. The PMOC met with WMATA on April 6, 2010 to review the comments on the draft RFMP. The PMOC again met with WMATA on June 2, 2010, at WMATA's request, to further discuss the comments. WMATA is in the process of updating the RFMP and anticipates submission of a revised draft in August.
- MWAA's Safety and Security Management Plan, Revision No. 6 dated January 2009 was accepted by the FTA on January 27, 2009. MWAA submitted the SSMP, Revision 7, to the FTA on September 23, 2009. The changes in Revision 7 were minor in nature and reflected changes in personnel assignments, integration of the Fire/Life Safety Working Group with the Safety/Security Certification Working Group, and updates to schedules. Due to the minor nature of the changes, no response is expected from the FTA.

4. Project Schedule

The most recent MWAA analyzed project schedule update has a data date of *June* 25, 2010. The primary critical path identified by DTP reflects a -92 calendar day variance in the achievement of the SSCD from that reflected in the approved Baseline Schedule. This variance reflects a 2 calendar day *loss* in the critical path since the *May* schedule update and yields a March 4, 2014 ROD. MWAA directed DTP to resubmit the June 25th schedule update incorporating MWAA's comments relative to the critical path.

DTP's July schedule update, which has not yet been analyzed, reflects a total -91 calendar days delay. MWAA continues to note that it does not agree with the critical paths presented by DTP as being reflective of the critical path of the Project. MWAA and DTP met several times during the month of July to review DTP's recovery schedule, which was finalized and submitted to MWAA on July 26, 2010 with a request for Change RFC-112 Rev. 0 entitled "Design-Build Acceleration for Delays through June 25, 2010." RFC-112 provides a recovery schedule intended to mitigate ninety-one (91) days of delay to the forecast Project Substantial Completion. The RFC includes an acceleration cost of \$23.7M. MWAA is reviewing the RFC. The FFGA ROD is December 1, 2014.

During the month of July 2010, Construction work began in Tysons West guideway, work continues at the O-1 Guideway and Tysons East corridor aerial substructure; at Magarity, Pimmit, Hunter Mill, Difficult Run and W&OD bridges; Tysons East, Tysons Central 123, Tysons Central 7 and Wiehle Avenue Stations; detention ponds at the DIAAH and West Cut-

Cover Tunnel; MOT, retaining walls and storm drainage along the DCR and DIAAH; NATM tunnel work continues to progress on schedule for the inbound and outbound tunnels; the WFCY Lead Tunnel continues; Early Roadway work continues at various locations; segmental erection by launch truss #1 continues and launch truss #2 assembly began this month.

DTP's July schedule narrative notes that the primary driver behind the adverse impacts to the critical path schedule continues to be the forecast completion of UR Program work required to support the interface with the DB's C-6 Early Roadway subcontractor working along the Route 7 corridor in the vicinity of Tysons West Station. Although UR delays continued this month with the remaining utility agencies, DTP reports that it was able again to mitigate UR delays. DTP reports that this month they mitigated a 26 day slip in Level 3 Communications by working more concurrently with UR activities. As a result, last month's newly developed work-around plan involving three separate traffic detours at Operations Area 8 is still on schedule. They include Route 7 eastbound at Tysons West Station by August 28, 2010; Route 7 westbound at Tysons West Station by September 10, 2010; and Route 7 west of the station by September 23, 2010. DTP again notes that while this allows critical work to proceed sooner, the resulting work areas are smaller and will cause some inefficiency in the construction.

DTP states that the UR work continues to impede access and/or progress of work in a continuous manner, specifically in the vicinity of Spring Hill Road and to the west. The delay is due to various utility agency impacts, with the primary delay being *Level 3 Communication*. UR delays continue with the balance of utility agencies, including DVP, Verizon Business (MCI), AboveNet, Fiberlight and *Cox Communication*.

MWAA has indicated that the primary impact is from Verizon telephone existing overhead cables on the north and south sides of Route 7 from Spring Hill Road to the west. Verizon is working on the cutovers of these cables and is expecting to be completed on the south side by the first week of August.

The MCI and Abovenet cables have been lowered out of the way of the follow-on road shift work. DVP and Cox Communications have completed their cutovers and the overhead lines and poles are ready to be removed on the south side of Route 7.

The WFC Yard upgrade work now reflects a completion of the full facility in January 2014 as compared to the August 2014 completion date forecast in the April schedule. DTP *stated* in its May schedule narrative that this improved date "incorporates a number of assumptions with regards to permitting and access to perform the work. DTP continues to finalize the WFCY schedule, which will be provided in a revised RFC-065 proposal." The WFCY work is still disconnected from the schedule's critical path. DTP's reason was stated in response to MWAA's review comment on the February Schedule as follows: "DTP has previously advised MWAA that the WFCY schedule will be excluded from the Project SSCD due to the delay imposed on the WFCY work. Until design progression allows for a firm schedule for this work and resolution of the commercial issues surrounding the WFCY, DTP's position remains unchanged. Therefore, the MWAA/PMSS suggestion that the WFCY is the primary critical path is not valid." MWAA continues to state its disagreement with DTP's completion date in light of the incomplete WFCY scope. DTP's June Schedule narrative states that "DTP resubmitted RFC-065 for the West Falls Church Yard schedule showing a

completion in January 2014. DTP anticipates that a new and separate contractual completion date for the WFCY will be established independent of the Project SSCD." It is the PMOC's opinion that the 'independent contractual completion date' must still support the Project Operational Readiness Date".

A "West Falls Church Yard Tie-in Execution Plan Update Meeting" was conducted on July 29, 2010. This was an informative and productive meeting with MWAA, DTP and WMATA represented. It was noted that the first plan presented in April and the updated power point presentation had incorporated review comments from all stakeholders. The presentation was intended to gain WMATA's feedback on the current execution plan to build the new storage tracks, the new S&I Shop, TPSS, sound cover box and the yard lead tunnel and tracks. The power point presentation covered the "Key Planning Parameters", "DTP's Current Approach", Existing Site Conditions" and "Next Steps: WMATA Input and Feedback." It was further noted during this meeting that efforts were underway to schedule the completion of this yard expansion in time to support the Project's Operational Readiness Date.

Bi-weekly meetings held between MWAA and DTP with regard to the schedule and schedule mitigation efforts continue to yield work-arounds and some increased shifts, particularly with regard to the late UR work, VDOT MOT approvals and design package reviews. It remains the PMOC's opinion that MWAA is maintaining control over the Project master schedule, with the exception of the WFCY schedule that continues to be of concern relative to meeting the scheduled Project Operational Readiness Date (ORD). In addition, the critical path, the weather delays and schedule logic issues are yet to be resolved. Also, MWAA and DTP continue to voice concern with WMATA's, VDOT's and DGS's abilities to provide timely design review comments and to issue timely permits. Some improvement with permit issuance was observed in the past month. August is expected to be another big month for permit issuance needs.

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

- Changes to segmental girders for the I-495 crossing and schedule conflict with HOT Lanes Project.
- Utility companies meeting the project schedule.
- Utility redesign/relocation due to interferences.
- WFCY design, construction and commissioning.
- Weather Delays.
- Inability of DTP to achieve design finalizations.
- A potential systemwide upgrade program by WMATA could have numerous technical scope changes impacting Traction Power, Automatic Train Control and Communications.

a. Critical Path Evaluation

The PMOC agrees with MWAA's assessment regarding the critical path. The Project will need to continue its efforts to resolve disagreements relative to the WFCY, critical path, logic and delay issues in order to minimize the risk of irretrievable schedule creep leading to costly schedule compression or constructive acceleration. It is the PMOC's opinion that the majority of the UR work and design related permit issues will be resolved within the next

several months and that schedule recovery will progress during the third and fourth quarters of 2010.

The schedule update with a data date of June 25, 2010 was again not agreed to by MWAA. MWAA has not agreed to the critical path in any schedule update submitted by DTP for more than a year. MWAA directed DTP to revise and resubmit the schedule update.

The June 25th update schedule critical path reflected a -92 calendar day variance in the substantial completion date (SSCD) from the approved baseline schedule. This reflects a loss of another two days over the May 25, 2010 schedule update. DTP's June update critical path continues to show an origin being driven by incomplete utility relocations (specifically, Verizon Telephone) impacting the Route 7 lane shift. This lane shift impacts the creation of the work zone necessary to construct the Tysons West Aerial Guideway and Tysons West Station. MWAA disagreed with this as the critical path based on the contract definition that the longest path sort be used. This produces a critical path originating with the pile cap installation at Tysons 123 Station which was identified by DTP as being the second most critical path. MWAA asked DTP to resubmit the June schedule update with the corrections.

In addition, MWAA is considering an acceleration plan to mitigate the schedule delay. This plan will consider the addition of additional crews, a second shift and/or an additional launching truss to erect segmental box girders for the Tysons West Guideway.

MWAA started a concerted effort during July to resolve the continuing disagreements with DTP over schedule updates. Although meetings have been held with the contractor, resolution of differences has not been reached.

The following table compares the milestone dates relative to the approved baseline schedule. The PMOC concurs with MWAA's assessment of the updated schedule and expects that discussions will continue with DTP to reach resolution on the schedule. However, the PMOC is not optimistic that DTP's goal is to reach resolution with regard to the schedule disagreement.

MILESTONE	June 2008 Baseline	May 2010 Schedule	June 2010 Schedule
1,41EE61 01 (E	Schedule	Seneume	(NOT ACCEPTED)
Receipt of FFGA	03/03/091	03/10/09 ^A	03/10/09 ^A
Station Design Complete	10/21/09 ¹	11/22/10	11/10/10
Utility Relocation Complete	$03/05/10^1$	11/15/10	12/22/10
Aerial and Station Foundations Complete	03/04/11	06/23/11	07/14/11
NATM Tunnels Mined	01/29/11	01/11/11	01/06/11
K-Line Tie-In	12/23/11	03/23/12	03/23/12
Guideway Complete	02/12/12	09/07/12	09/28/12
Train Control Complete	10/26/12	01/21/13	02/01/13
Substantial Completion	07/31/13	10/29/13	10/31/13
Revenue Operations - Target	11/27/13	03/12/14	03/03/14
FFGA Revenue Operations	12/01/14	12/01/14	12/01/14

13

^A Actual Date

¹ Date was not met.

b. Important Activities – 90 Day Look Ahead

The important milestones that are expected to be completed during the next 90 - days include the following:

- Completion of the engineering for the K-Line Tie-in (OP-1).
- Completion of engineering for the Tysons East Aerial Guideway (OP-5a).
- Completion of utility relocation.
- Property acquisitions for the Tysons West Aerial Guideway (OP-8).

5. Project Cost

The SCC Budget and Expenditures summary for the period ending *June* 25, 2010 is as follows. Overall, approximately 23% of the budget has been expended through *June* 25, 2010.

FTA SCC CODE	DESCRIPTION	BASELINE BUDGET	CURRENT BUDGET ¹	EXPENDED TO DATE	ESTIMATE AT COMPLETION
10	Guideway and Track Elements	\$ 666,500,284	\$ 634,612,634	\$ 111,387,865	\$ 634,612,634
20	Stations	\$ 317,023,979	\$ 315,699,620	\$ 21,470,590	\$ 315,699,620
30	West Falls Church Yard	\$ 51,789,539	\$ 51,484,608	\$ 2,711,848	\$ 51,846,378
40	Site Work & Utility Relocation	\$ 232,936,987	\$ 235,954,245	\$ 92,812,558	\$ 238,833,106
50	Systems	\$ 278,157,645	\$ 285,644,779	\$ 25,981,169	\$ 284,412,001
60	Right of Way Acquisition	\$ 45,953,303	\$ 45,953,303	\$ 48,001,640	\$ 70,207,408
70	Vehicles	\$ 211,629,775	\$ 211,629,775	\$ 6,892,360	\$ 210,926,012
80	Professional Service	\$ 698,471,472	\$ 715,608,643	\$ 426,828,093	\$ 726,478,026
90	Contingency Mgmt. Reserve	\$ 130,000,075	\$ 135,899,457	\$ -	\$ 99,471,879
100	Finance Charge	\$ 509,984,571	\$ 509,984,571	\$ -	\$ 509,984,571
	TOTAL (Federal portion)	\$ 3,142,471,634	\$ 3,142,471,634	\$ 736,086,122	\$ 3,142,471,634

^{1.} Current budget equals FFGA amount plus approved Change Orders CO-001-053 except CO-0049, Directive Letters 001-011, UR-CO-001-024

a. Explanation of Variances

The major variances in the project budget are associated in four categories as noted below:

- 1. SCC10 Guideway and Track Elements has been reduced approximately \$31 million due to the decision by the DB contractor to self perform the NATM tunnel work. Of this major reduction, \$18 million was transferred to SCC 80.
- 2. SCC40 Site work and Utility Relocation has been increased by approximately \$6 million as a result of utility relocation change orders.
- 3. SCC60 Right of Way Acquisition experienced nearly \$24 million increase in the right-of-way (ROW) acquisition. This was due to a single property that had been anticipated as being a dedication having to be acquired by condemnation.
- 4. SCC80 Professional Services increased approximately \$28 million due to the \$18 million for design, project management and construction management

of the tunnel. \$1.3 million is associated with Final Design of the tunnel and \$17.5 million is associated with Project Management and Construction Management. The balance is primarily due to utility relocation design overruns and the design for TPSS #9 and #11 in the amount of \$1.2 million which was transferred to the non-federal portion of the project. SCC80 was increased by approximately \$4.4 million for 33 change orders and \$2.4 million for other budget transfers, as well as \$3.5 million increase for VDOT.

b. Monthly Cost Report - June 2010

Design-Build Contract FEDERAL (FRGA SCOPE)	DESCRIPTION DESCRIPTION		F	FGA AMOUNT	EX	PENDITURE TO		ESTIMATE TO		ESTIMATE AT
Design-Build Contract						DATE ¹		COMPLETE		COMPLETION
Firm Fixed Price		FEDERAL (FFG/	A SCOPE)						
Firm Fixed Price Subtocal	Design-Build Contract									
Firm Fixed Price Subtoral \$ 1,177,161,500 \$ 422,663,26 \$ 1,002,163,261 \$ 1,424,85 \$ 1,002,163,261 \$ 1,424,85 \$ 1,003,163,361 \$ 1,424,85 \$ 1,003,163,361 \$ 1,424,85 \$ 1,003,163,361 \$ 1,424,85 \$ 1,003,163,361 \$ 1,424,85 \$ 1,003,163,361 \$ 1,424,85 \$ 1,003,163,361 \$ 1,424,85 \$ 1,003,163,361 \$ 1,424,85 \$ 1,003,163,361 \$ 1,424,85 \$ 1,003,163,361 \$ 1,424,85 \$ 1,426,665 \$ 1,226,244,373 \$ 1,658,85 \$ 1,424,151,42 \$ 1,716,718	Firm Fixed Price			1,112,052,172	\$			996,986,014		1,359,322,820
Subcontract Allowance	Firm Fixed Price Insurance and Bonds		\$	65,109,408	\$	60,299,520	\$	5,177,846	\$	65,477,366
Design-Build Contract Prices \$ 1,607,361,397 \$ 422,636,326 \$ 1,226,247,33 \$ 1,653,80 \$ 5.79,0700 \$ 5.79		Firm Fixed Price Subtotal	_		_	422,636,326	_		_	1,424,800,186
Indexed Commodity Escalation	Subcontract Allowance		_		_	-	i		_	234,080,872
Design-Build Contract Total \$ 1,684,831,324 \$ 42,263,626 \$ 1,294,151,742 \$ 1,716,70		Design-Build Contract Prices			\$	422,636,326	_		_	1,658,881,058
Utility Work	Indexed Commodity Escalation		_				·		·	57,907,009
Utility Work		Design-Build Contract Total	\$	1,684,831,324	\$	422,636,326	\$	1,294,151,742	\$	1,716,788,067
Terf Tax		1								
Project Management and Final Design			\$	84,312,807	_	66,443,764	·			87,261,469
Night of Way Sight Of Way Total S 92,736,233 S 80,362,503 S 21,939,594 S 102,33					<u> </u>	-	·		·	0
Right of Way Right Of Way Total S	Project Management and Final Design		_							15,094,988
Right Of Way Total \$ 42,443,132 \$ 48,001,640 \$ 22,25,768 \$ 70,22		Utility Relocation Total	\$	92,736,233	\$	80,362,503	\$	21,993,954	\$	102,356,457
WANTA Agreement Vehicles S 195,138,329 S 6,892,360 S 187,542,207 S 194,47	Right of Way				_					
Vehicles		Right Of Way Total	\$	42,443,132	\$	48,001,640	\$	22,205,768	\$	70,207,408
Contingency S 31,484,79 S 1,162,751 S 29,404,273 S 30,58										
MMATA Force Account Startup \$ 13,777,100 \$ 1,055,706 \$ 12,349,315 \$ 13,44					_		·		_	194,434,567
Project Management and Final Design S					_		_		_	30,567,024
Preliminary Engineering 2.3 271,635,628 \$ 16,734,595 \$ 254,901,033 \$ 271,63			_		_		·		_	13,405,021
Preliminary Engineering 2-3	Project Management and Final Design						_			33,229,017
Preliminary Engineering Total \$ 100,968,646 \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ \$ \$ 100,730,999 \$ 100,730,999		WMATA Agreement Total	\$	271,635,628	\$	16,734,595	\$	254,901,033	\$	271,635,628
Airports Authority Services Salas	Preliminary Engineering ^{2,3}									
See		Preliminary Engineering Total	\$	100,968,646	\$	100,730,999	\$	-	\$	100,730,999
Airports Authority Project Management and S 23,225,717 S 12,660,457 S 10,635,260 S 34,540,0995 S 93,57 S 50,536,588 S 43,040,995 S 93,57 S S 50,536,588 S 43,040,995 S 93,57 S S S S S S S S S	Airports Authority Services									
Airports Authority Project Management and S 23,225,717 S 12,660,457 S 10,635,260 S 34,540,0995 S 93,57 S 50,536,588 S 43,040,995 S 93,57 S S 50,536,588 S 43,040,995 S 93,57 S S S S S S S S S	General Conditions 4		\$	28,879,153	\$	4,423,016	\$	22,446,669	\$	26,869,684
Wiehle Avenue Garage	Airports Authority Project Management and			, ,	Ė	, ,	Ė		Ė	· · · · ·
Project Management Support			\$	23,225,717	\$	12,660,457	\$	10,635,260	\$	23,295,717
Contingency Contingency Total \$ 297,762,579 \$ -	Project Management Support		\$				\$	43,040,995	\$	93,577,583
Contingency Total \$ 297,762,579 \$ - \$ 227,025,519 \$ 227,025 \$ 5 227,025,519 \$ 227,		Airports Authority Services Total	\$	142,109,519	\$	67,620,060	\$	76,122,924	\$	143,742,984
Finance Costs Finance Costs Total \$ 509,984,571 \$ - \$ 509,984,571 \$ 509,98	Contingency									
Finance Costs Total \$ 509,984,571 \$ - \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 509,984,571 \$ 3,142,471,634 \$ 736,086,123 \$ 2,406,385,511 \$ 3,142,471,634 \$ 736,086,123 \$ 2,406,385,511 \$ 3,142,471,634 \$ 736,086,123 \$ 2,406,385,511 \$ 3,142,471,634 \$ 736,086,123 \$ 2,406,385,511 \$ 3,142,471,634 \$ 736,086,123 \$ 2,4167,889 \$ 2,755,485 \$ 2,889,450 \$ 2,631,867 \$ 379,552 \$ 3,007,632		Contingency Total	\$	297,762,579	\$	-	\$	227,025,519	\$	227,025,519
S 3,142,471,634 \$ 736,086,123 \$ 2,406,385,511 \$ 3,142,47	Finance Costs									
INTERRELATED HIGHWAY IMPROVEMENTS		Finance Costs Total	\$	509,984,571	\$	-	\$	509,984,571	\$	509,984,571
INTERRELATED HIGHWAY IMPROVEMENTS	Total Federal (FFGA Scope)		Ś	3.142.471.634	Ś	736.086.123	Ś	2.406.385.511	Ś	3,142,471,634
Design-Build Contract		INTERRELATED HIGH	IWA		_					
Firm Fixed Price - Engineering	Design-Build Contract									
Firm Fixed Price Insurance and Bonds \$ 2,889,450 \$ 2,631,867 \$ 379,552 \$ 3,00			Ś	5,929,082	Ś	3.428.960	Ś	24.167.889	Ś	27,596,849
Firm Fixed Price Subtotal \$ 8,818,532 \$ 6,060,827 \$ 24,547,441 \$ 30,61					_		_		_	3,011,419
Subcontract Allowance \$ 18,854,682 \$ - \$ 18,854,682 \$ 18,85		Firm Fixed Price Subtotal	_		_		_		·	30,608,268
Design-Build Contract Total \$ 27,673,214 \$ 6,060,827 \$ 43,402,123 \$ 49,40	Subcontract Allowance				_	-	_		_	18,854,682
Utility Relocation		Design-Build Contract Total	_		_	6,060,827	_		_	49,462,950
Utility Work	Utility Relocation			, ,		, , , , ,		, . , ==	_	, , , , , , , , , ,
Terf Tax			\$	31,552,369	\$	36,004,911	\$	8,434,345	\$	44,439,255
Project Management and Final Design					_	-		, , -		
Utility Relocation Total \$ 36,279,918 \$ 42,245,419 \$ 9,841,025 \$ 52,08 Right of Way Right Of Way Total \$ 44,772,663 \$ 14,204,247 \$ 3,283,486 \$ 17,48 Airports Authority Services \$ 1,289,148 \$ 126,108 \$ 1,48 Contingency Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,75 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,75 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,75 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,75 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,75 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,75 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,755 Contingency Total \$ 2,755			\$	4,727,549	<u> </u>					7,647,189
Right of Way Right Of Way Total 44,772,663 14,204,247 3,283,486 17,48 Airports Authority Services \$ 1,289,148 \$ 126,108 \$ 1,4 Contingency \$ 1,289,148 \$ 126,108 \$ 1,4 Contingency \$ 1,482,435 \$ - \$ 2,755,845 \$ 2,75		Utility Relocation Total		36,279,918						52,086,444
Airports Authority Services General Conditions Airports Authority Services Total Airports Authori	Right of Way									
Airports Authority Services General Conditions Airports Authority Services Total Airports Authority Services Total Airports Authority Services Total Contingency Contingency Total 14,482,435 126,108 126,108 1,44 126,108 1,4		Right Of Way Total	\$	44,772,663	\$	14,204,247	\$	3,283,486	\$	17,487,733
General Conditions	Airports Authority Services									
Airports Authority Services Total \$ \$ \$ 1,289,148 \$ 126,108 \$ 1,48	, ,				\$	1,289.148	Ś	126.108	\$	1,415,256
Contingency Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,75		Airports Authority Services Total	\$		_		_			1,415,256
Contingency Total \$ 14,482,435 \$ - \$ 2,755,845 \$ 2,75	Contingency	,				,,	_			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		Contingency Total	Ś	14.482.435	Ś		Ś	2.755.845	Ś	2,755,845
	Total Interrelated Highway Improvements	Commission Form	\$	123,208,229	\$	63,799,642	\$	59,408,587	\$	123,208,229
	- Inportant	TOTAL PROJECT COST			_		_		_	3,265,679,863

¹ Reflects Costs through June 25, 2010

July 2010

² Preliminary Engineering Period - 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 was transferred to unallocated contingency

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

c. Project Funding Sources: June 2010

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		\$	-
Final Design Grant	VA-03-0113-01		\$	159,001,838	\$ 159,001,838		\$	-
ARRA Construction Grant	VA-36-0001-00		\$	77,260,000	\$ 77,260,000		\$	-
FFGA Construction Grant	VA-03-0113-02		\$	28,809,000			\$	28,809,000
FFGA Balance	Planned		\$	580,516,636	\$ -		\$	580,516,636
Subtotal - New Starts		28.64%	\$	900,000,000	\$ 290,674,364	32.30%	\$	609,325,636
Other Federal Funds								
Sec 5307 Surface Transportation Program								
Construction Grant	VA-95-X056-01		\$	47,218,109	\$ 29,269,033		\$	17,949,076
STP Balance	Planned		\$	27,781,891	\$ -		\$	27,781,891
STP/Sec. 5307		2.39%	\$	75,000,000	\$ 29,269,033	39%	\$	45,730,967
Local Funds								
VTA 2000			\$	51,700,000	\$ 51,700,000		\$	-
Commonwealth Transportation Bonds ²			\$	125,000,000	\$ 59,932,692		\$	65,067,308
Fairfax County Funds ³			\$	523,750,000	\$ 47,000,000		\$	476,750,000
Dulles Toll Road Revenues ^{2,4}			\$1,	467,021,634	\$ 257,510,034		\$	1,209,511,600
Subtotal - Local Funds		68.97%	\$2,	167,471,634	\$ 416,142,726	19.20%	\$	1,751,328,908
Total Project Budget		100%	\$3,	142,471,634	\$ 736,086,123		\$	2,406,385,511
Lancard Mark Control			l ć	422 200 222	ć 62 700 612		۵	50 400 507
Interrelated Highway Activities			_	, ,	\$ 63,799,642	-1 -00/	\$	59,408,587
DTR Revenues/Commonwealth Funds ³			_	123,208,229	\$ 63,799,642	51.78%	\$	59,408,587
		TOTAL	Į \$3,	265,679,863	\$ 799,885,765		Ş	2,465,794,098

¹ Reflects costs through June 2010

² 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

6. Project Risks

The PMOC commenced the risk assessment process with the first workshop held April 4-7, 2006. Risk Assessment Workshops were held on June 12-14, 2007 and July 10-12, 2007 at the Project offices.

In August 2008, the PMOC was directed by the FTA 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 cost 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.

Through *June 25*, 2010, MWAA reports that it has utilized \$70,998,644 of the available authorized contingency of \$139,000,000 for Contingency Phases 1, 2 and 3. Phases 1 and 2 were to carry the Project through the completion of stations design which was anticipated to have been completed by the end of the third quarter of 2009. The completion of stations design is now anticipated during the *fourth* quarter of 2010. Phase 3 would complete the Utility Relocation Program now anticipated to complete in late August 2010. Of the total project contingency of \$297,762,579, the project has \$226,763,935 available. The impact of the completion of station design and utility relocation on the cost contingency must be determined and remains an unknown. MWAA presented information to the PMOC at the May 6, 2010 meeting which it feels justifies advancing to Contingency Phase 3. The PMOC noted during the June 3rd meeting that the white paper only addresses schedule contingency and not cost contingency. MWAA revised the white paper to include a discussion of cost contingency. *To date, the PMOC has not agreed that the Project has advanced to Contingency Phase 3*. The PMOC also requested that MWAA update the Risk Management Plan.

With regard to Schedule Contingency, the Project has utilized 92 calendar days of the total of 510 calendar days. The balance in schedule contingency is 418 calendar days.

MWAA has been following their Risk Management Plan dated October 2008. The following are the Project's top 10 cost and schedule risks, along with their current status.

Top 10 Project Risks

Risk	Risk Description	SCC	Risk C	ategory	Status
No.		Reference	Cost	Sched	(Change from Previous Month)
M-21	Allowance items- a substantial part of the contract price is tied to "Allowance Subcontracts." There is potential risk for increased project cost and schedule if the actual subcontracts exceed the allocated cost and schedule components in the contract.	10, 20, 30, 40, 50	X	X	Unchanged. Thirteen of thirtyone sub-contract packages have been awarded to date. The variance of the awarded cost versus allowance budget is \$11.87 million.
C-8	NATM tunnel—there are a limited number of qualified tunneling contractors, unforeseen conditions, tunnel collapse, production rate slower than anticipated, and possible critical path delay.	10.07	X	X	Unchanged. The contractor is self-performing this work. Mining construction has commenced, with 1,218-feet of excavation complete on the outbound tunnel and 957-feet of excavation complete on the inbound tunnel.
C-29	Soils Management – risk that costs for disposal of soil (clean and contaminated) may exceed budget.	40.1	X	X	Unchanged. Agreements with MWAA allow "clean" soils, which represent about 90% of all project soils to be transferred to Laydown Area #11, and management of contaminated soils is being mitigated as schedule progresses.
D-29	WFCY maintenance annex – Design constraints and WMATA requirements may erode the cost reductions anticipated.	30	X		Unchanged.
C-34	Utility companies performing utility relocation are not performing in accordance with the durations incorporated in the project schedule.	40.02	X	X	Increased. (Replaced risk C-14.) Utility contractors faced heavy spring rains and unforeseen obstacles. Mitigation efforts continue and progress is being made. However, the cost and schedule impacts are not yet known and forecast completion dates continue to slip.

Risk	Risk Description	SCC	Risk C	ategory	Status
No.		Reference	Cost	Sched	(Change from Previous
					Month)
M-16	Cost risk for vehicle procurement	20.01	X	X	Increased. Bids were received
	- size and timing of base order	20.02			on June 19, 2009. The
	and options could change the car				WMATA Board approved an
	manufacturer's interest in project				award recommendation to
	and proposal pricing; vehicles				Kawasaki on May 27, 2010.
	may not be available in time for				However, the delivery of the last car is not scheduled to
	revenue operations.				occur until September 12, 2014
					which does not support Project
					needs. The WMATA Board
					awarded the contract to
					Kawasaki on July 27, 2010. A
					revised delivery date schedule
					has not been submitted.
M-12	Unpredictability of ROW	10.04	X		Unchanged. Use of
	settlement costs.				condemnation has increased
G 20	WD (ATTA	10.00	37	37	the ROW costs.
C-20	WMATA scope of work, including site access support,	10.00 20.00	X	X	<i>Increased.</i> Technical support for design has been generally
	technical support and WMATA	50.00			provided in a timely manner,
	construction elements may exceed	30.00			although the backlog of design
	the budget and schedule. In				reviews continues to increase.
	addition, there is the risk that				SSWPs required to access
	WMATA will have difficulty				WMATA property are lengthy.
	supporting the DB contractor's				There is potential risk with
	requirements.				WMATA directing systems
					design upgrades for ATC,
					Traction Power and
D 10	Cort of Dominio VIII in D	50.04	***		Communications systems.
D-19	Cost of Dominion Virginia Power (DVP) 34.5 kV distribution –	50.04	X		Unchanged. Design of ductbank that will contain 34.5
	Level of design is not typical of				kV power the length of project
	100% PE design.				has been completed and the
	10070 1 D deoign.				ductbank construction
					continues. Design by DVP to
					bring power to project has not
					been completed.

Risk	Risk Description	SCC	Risk C	ategory	Status
No.		Reference	Cost	Sched	(Change from Previous
					Month)
D-27	Permit Approvals – Potential	10.00	X	X	Unchanged. The issuance of
	delays due to the Virginia	20.00			construction permits is taking
	Department of Transportation	40.00			longer than anticipated and the
	(VDOT) requiring their				contractor is claiming that its
	review/approval of final design				costs are increasing. The Six
	plans prior to Issued for Proposal				Sigma process improved turn-
	(IFP) submittals. Potential delays				around time with VDOT. The
	due to the Department of General				VDOT requirement for final
	Services (DGS) making design-				design plans prior to IFP
	related comments rather than				submittals may increase the
	strictly permit/code comments.				risk. In addition, DGS is
					making design-related
					comments rather than strictly
					code/permit evaluations.

7. Action Items

MWAA - DULLES CORRIDOR METRORAIL PROJECT - Items for Grantee Action

PR	ITEM	IDENTIFICATION	NATURE of PROBLEM	D	A	I	COMMENTS	STATUS
1	2A.01	PMP Update (Nov. 2009)	MWAA's PMP needs to be updated to reflect the new integrated organization.	Y	N	N	The integrated organizational structure has been formally implemented, and the PMP is now being updated to reflect this. MWAA received the PMOC's comments from the PMP Compliance Review held on October 14, 2009. MWAA now anticipates updating the PMP by late <i>August</i> 2010.	R
1	2B.01	Final Testing Plan for Reused Piers (Feb. 2010)	MWAA approved the final testing plan (Rev 0) proposed by DTP for the Re-used Piers on March 30, 2010.	Y	Y	N	Eight PDA tests and 3 static load tests were conducted between the period of April 14, 2010 and June 25, 2010. This concluded the load tests on all eleven existing pier foundations. The peripheral tests, i.e. soils, metallurgical, stray current, corrosion and concrete tests were completed in the field and laboratory during the months of June and July. DTP submitted its comprehensive report to MWAA on July 20, 2010. Bruce Spiro of CTI reported that his independent test report for the existing foundations would be submitted to MWAA on August 16. MWAA and CTI will be conducting an audit of DTP's design calculations and related test data on September 15, 2010 to ensure that the test data supports the design requirements.	R

KEY ITEM

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

LEGEND

GRANTEE ACTION PMO CONTRACTOR STATUS PRIORITY (PR)

1- Most Critical D – Remedial Action Developed A – Remedial Action Approved

R – Review On-going C – Completed – No further review required 2- Critical

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

ARRA American Reinvestment and Recovery Act

ASSHTO American Association of State Highway and Transportation Officials

BFMP Bus Fleet Management Plan

CD Calendar Days
CPM Critical Path Method

CTI Consultants, Inc.

DB Design-Build

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

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

HOTHigh Occupancy TollIFCIssued For ConstructionIFPIssued for Proposal

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
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

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

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

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

WMATA Washington Metropolitan Area Transit Authority

XO Executive Officer

Appendix B - Project Overview and Map

Date: August 25, 2010 (reporting current through *July*, 2010)

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 2300-car parking facility (provided through a joint development agreement), 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 is planning to purchase sixty-four vehicles for Phase 1 which 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		
03/6/14	Revenue Operations Date (ROD) as of June 25, 2010				
18.0%	Percent Complete Construction at date of this report				
25.05%	Percent Complete Time based on ROD of December 1, 2014 (based on FFGA)				
36.69%	MWAA's Estimate of Project Earned Value through July 2010				

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 \$736.09 million Expenditures *through June 2010* from total project budget of \$3.142 billion

23% Percent complete based on federal expenditures through June 2010.

\$198.5 million Total project contingency remaining (allocated and unallocated) through June

2010.

Project Map

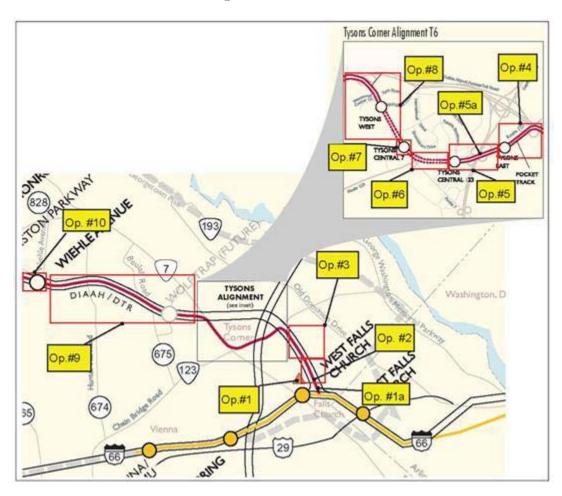
APPENDIX B - METRORAIL EXTENSION TO WIEHLE AVENUE Virginia WIEHLE AVENUE TYSONS CORNER Maryland Washington DC CLARENDON DUNNLORING VIRGINIA SQ CHIU [10] **DULLES CORRIDOR** METRORAIL PROJECT 3 MILES **LEGEND** Existing Orange Line Track and Station New Station Surface Track Partially Below Surface Station Elevated Track Transfer Station

Parking

Underground Station

······ Underground Track

Operational Areas



$APPENDIX\ C-\underline{MWAA\ SAFETY\ AND\ SECURITY\ CHECKLIST}$

Project Overview				
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			
Design/Build/Operate/Maintain, CMGG, etc)				
Project Plans		Review By FTA	Status	
Safety and Security Management Plan	9/2009		Accepted	
Safety and Security Certification Plan			Under development; 98% complete	
System Safety Program Plan			WMATA submitted a revised SSPP to TOC in March 2010 which is under review by TOC.	
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 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	WMATA's SSMP will be used. Revised SSPP dated March 2010 is under review by TOC.	
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 two representatives at the June 30, 2010 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		
Is the SSMP project-specific, clearly demonstrating the scope of safety and security activities for this project?	Y	
Grantee reviews the SSMP and related project plans to determine if updates are necessary?	Y	
Does the grantee 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.	N	WMATA
Does the grantee maintain a regularly scheduled report on the status of safety and security activities?	N	WMATA
Has the grantee established staffing requirements, procedures and authority for safety and security activities throughout all project phases?	N	WMATA
Does the grantee update the safety and security responsibility matrix/organizational chart as necessary?	N	WMATA
Has the grantee allocated sufficient resources to oversee or carry out safety and security activities?	N	WMATA
Has the grantee developed hazard and vulnerability analysis techniques, including specific types of analysis to be performed during different project phases?	Y	
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.		

Has the grantee ensured the development of safety		
design criteria?	Y	
Has the grantee ensured the development of security	3 7	
design criteria?	Y	
Has the grantee ensured conformance with safety	Y	
and security requirements in design?	1	
Has the grantee verified conformance with safety		
and security requirements in equipment and	Y	
materials procurement?		
Has the grantee verified construction specification	V	
conformance?	Y	
Has the grantee identified safety and security critical	Y	In progress, 98%
tests to be performed prior to passenger operations?	I	complete.
Has the grantee verified conformance with safety		
and security requirements during testing, inspection	N	After SSCD
and start-up phases?		
Does the grantee evaluated change orders, design		
waivers, or test variances for potential hazards and	Y	
/or vulnerabilities?		
Has the grantee ensured the performance of safety	3 7	
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 •	Y	
Integrated Test Plan and Procedures • Operations		
and Maintenance Plan • Emergency Operations Plan		
Has the grantee issued final safety and security		
certification?	N	
Has the grantee issued the final safety and security		
verification report?	N	
Construction Sa	afetv	
Does the grantee have a documented/implemented	<u>.</u>	
Contractor Safety Program with which it expects	Y	
contractors to comply?		
, and the second		DTP's Construction
		Safety, Health and
Does the grantee's contractor(s) have a documented	Y	Security Plan
company-wide safety and security program plan?		accepted on January
		6, 2009.
Does the grantee's contractor(s) have a site-specific		-, -00).
safety and security program plan?	Y	
Provide the grantee's OSHA statistics compared to		
the national average for the same type of work?	N	
If the comparison is not favorable, what actions are		
being taken by the grantee to improve its safety		
record?		
100010.		

Does the grantee conduct site audits of the		
contractor's performance versus required	Y	
safety/security procedures?		
Federal Railroad Administration		
If shared track: has grantee submitted its waiver		Heavy Rail Transit
request application to FRA? (Please identify specific	N/A	Project. No FRA
regulations for which waivers are being requested)		involvement.
If shared corridor: has grantee specified specific	N/A	
measures to address shared corridor safety concerns?	IN/A	
Is the Collision Hazard Analysis underway?	N/A	
Other FRA required Hazard Analysis – Fencing,	N/A	
etc.?	IN/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

