

COMPREHENSIVE MONTHLY REPORT

August 2011

**Dulles Corridor Metrorail Project
Extension to Wiehle Avenue**
Metropolitan Washington Airports Authority
Washington, DC

September 23, 2011

PMOC Contract Number: DTFT60-09-D-00016

Task Order Number: 002, **Project Number:** DC-27-5142, **Work Order No.** 02

OPs Referenced: 01, 25

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Length of Time PMOC Assigned to Project: 10.5 years

Length of Time PMOC Lead Assigned to Project: 3.0 years

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EXECUTIVE SUMMARY

The Project Management Oversight Contractor (PMOC) met with Metropolitan Washington Airports Authority (MWAA) on *September 7, 2011* to conduct a monthly progress meeting. The full time on-site PMOC representative attended various project meetings and site tours throughout this reporting period. Additional information for this report was obtained from MWAA during the second week of *September 2011*. Future PMOC monthly progress meetings are planned to occur on the first *Tuesday* 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, 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 \$524.5 million in Section 5309 New Starts funds for the Project. The FTA has awarded \$404,483,364 in Section New Starts and \$68,499,999 in STP funds to date for the Project.

2. Project Status Summary

The PMOC met with MWAA on *September 7, 2011* to conduct a monthly progress review meeting. The status information is as of *August 31, 2011*, 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** *WMATA's current expectation is that the Preliminary Design Reviews (PDRs) will be completed by the end of October, six months past the baseline schedule date of May 3, 2011. The remaining PDRs involve the truck assembly. The September 8, 2011 WMATA/Kawasaki Progress Meeting was canceled and no new schedule changes have been received. However, WMATA is making a field trip to Japan on September 10, 2011 to check on the earthquake/tsunami impacts and Kawasaki's ability to mitigate the contract delays.*
- **Design progress** - Overall project design remains at 98% complete as of the end of *August 2011*.

MWAA hired an independent third party consultant to review Alstom’s safety analysis of the Generation 4 track circuit modules proposed for use on the Dulles Extension, issuing a NTP to Battelle on January 10, 2011 to begin the “Safety Analysis Review and Assessment.” Battelle’s revised schedule following a July 28, 2011 status meeting now shows December 14, 2011 for submission of the “Final Safety Assessment Report.” The Battelle safety review is progressing with the completion of the review of non-proprietary data and the interviews with WMATA. Battelle continued conducting their review of proprietary data at Alstom’s facilities in Rochester, NY in August. MWAA reported that Alstom has now agreed to participate in the Battelle interview process.

- **Construction progress** is broken into two components: utility relocation (UR), which is 99% complete, and design-build (DB) construction, which is approximately 50% complete. Significant accomplishments for August included continued segmental box girder installation on the Tyson East Guideway and Tysons East Station with Launch Girder Truss LG1; significant pier construction on the Tysons West Guideway along with significant segmental box girder installation with Launch Girder Truss LG2; major foundation, wall and column work on all five stations; mezzanine steel erection at the Tysons East, Tysons Central 123, Tysons West and Wiehle Avenue Stations; continued the IB NATM tunnel arch liner construction and OB safety walk construction. Launch Girder Truss L3 was damaged on July 25th during a back launching operation and disassembly continued through August and was completed on September 9.

CONSTRUCTION PROGRESS THROUGH AUGUST 2011			
GUIDEWAYS AND TRACKWAYS	% COMPLETE	STATIONS	% COMPLETE
O-1 Guideway	96%	Tysons East	29%
Tysons East Guideway	93%	Tysons Central 123	30%
NATM Tunnel	85%	Tysons Central 7	13%
Tysons West Guideway	58%	Tysons West	21%
O-3 Trackway	73%	Wiehle Avenue	32%
O-9 Trackway	83%		

- **The DTP Schedule Update** with a data date of July 25, 2011 showed a -188 day loss compared to the -89 calendar day loss reflected in the June 25, 2011 update. DTP states that these losses are attributable to “the cumulative result of past and current issues that have now resulted in the Critical Path originating with the TPSS 10 Facility.” These issues move the forecast SSCD to February 13, 2014, with a projected ROD of June 19, 2014. The DTP WFCY completion date, which is still disconnected from the mainline schedule, lost -7 days yielding a projected completion date of April 24, 2014. The FFGA ROD is December 1, 2014.

DTP submitted a zero loss recovery schedule on January 12, 2011, which proposed a mitigation period of fourteen months extending from January 2011 through February 2012. MWAA conditionally approved the schedule and authorized the constructive acceleration on a time and material basis. DTP submitted its cost proposal for \$11.5 million on March 2, 2011, and negotiations continue to be difficult and protracted. MWAA management anticipates

settlement by mid-September 2011 *as noted at the September 7, 2011 update meeting. On September 20, 2011, MWAA indicated that an agreement in principal for about \$7.2 million had been reached and the documentation is in preparation.*

The Project needs to increase its efforts to resolve differences relative to the DCMP mainline extension and the West Falls Church Yard (WFCY) schedule. The Project schedule has passed the 50% mark in expended calendar days and the risk of irretrievable schedule creep leading to costly schedule compression continues to grow. At the August 10 QRPM, MWAA stated that their date for completing the WFCY work is October 30, 2013; DTP's date is December 31, 2013. *At the September 7th update meeting, MWAA indicated that their position and DTP's remain the same.*

It appears to the PMOC that little to no progress is being made on schedule agreement. DTP's schedule with a data date of August 25, 2011 (*not yet analyzed by MWAA*) reflects a 194 calendar day variance to the plan. The PMOC believes that this additional -105 day increase since the June 25 schedule update is a tactical posturing move by DTP to argue costs associated with a mitigation schedule and the Request for Change (RFC) that will bring the SSCD back to August 9, 2013. The PMOC believes that, for the *third* consecutive month, DTP is blatantly misusing the schedule for claim posturing purposes instead of tracking real time progress and accurate completion projection. *MWAA reported that they received a mitigation schedule and request for change on September 7, 2011. MWAA reported that the primary driver to the delays and claimed increased costs are associated with the ETS and ETS Remote Monitoring System Changes requested by WMATA. They will begin their review and will share the documents with the FTA and PMOC.*

- **Budget** status as of July 25, 2011 indicates that \$1,380,412,603 (44%) has been expended of the \$3,142,471,634 budget total. MWAA reports \$176,915,998 (88%) of the available contingency for the first five contingency milestones has been utilized with a remaining contingency balance of \$23,084,002 (12%) available through the current phase of construction. **Because the federal portion of Allowance Items awarded to date is \$44,748,673 over budget, those Allowance Items yet to be awarded are estimated to be \$45.9 million over budget, and with nearly \$56 million in open Directive Letters funded by contingency of which only \$11.724 million is represented by executed change orders, the project will be officially over budget in a matter of months. The PMOC has begun a review of the actual and estimated obligated contingency for the remainder of the project.**

MWAA's estimate of the earned value for the Project through July 2011 is 58.00%.

- **Risk** -- The PMOC reviewed MWAA's updated Risk Assessment dated April 15, 2011. It was decided that the assessment needed to include an analysis of what the potential Kawasaki 7000 series cars delay will have on the Project schedule and FFGA completion date. MWAA submitted a draft "Risk Management Plan Rev 2a" on June 3, 2011. The PMOC provided comments on July 5, 2011 and MWAA, FTA and the PMOC met on July 6, 2011. MWAA submitted an updated draft RCMP Rev. 2b to the FTA on August 5, 2011. *MWAA and the PMOC met again on September 7, 2011 and discussed the relevancy of the "Proposed Top Ten Risks" and relevancy of the milestones listed on Table 3-1. Some changes were discussed that will be included in an informal e-mail submittal during the second week in September for further review and comment.*

The Full Time Equivalents (FTE) estimated total for *August* is 1,626, which is a *decrease* of 11 from the *July* actual of 1,637 and appears to provide suitable support to the scheduled activities. The pre-casting facility continues to produce pre-cast segments in advance of the schedule needs.

Piers Re-Use Testing Reports and Program Status: MWAA's President and Chief Executive Officer sent a wrap-up letter to the FTA Administrator on April 8, 2011, stating that MWAA had complied with the FTA's direction and had accepted the DTP Inspection and Test Program Final Report for Existing Pile Foundations. WMATA notified MWAA by letter dated June 22, 2011 that the testing program results were acceptable to WMATA. MWAA reports that DTP has committed to completing all post construction corrosion control related activities noted above by the end of the second quarter of 2012. The PMOC *issued* a spot report *on July 28, 2011* with regard to the overall Inspection and Test Program. MWAA/QA provided a final summary report to the FTA *on August 17, 2011*.

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 betterments and billed to the responsible parties. It is the PMOC's opinion that the change orders for WMATA requested ETS and TPSS Remote Monitoring result in impacts to schedule and cost contingency that need to be examined and considered carefully to determine whether or not they are betterments, and should not be funded under the federal portion of the program. *It is the PMOC's opinion that the remote monitoring requirement is outside MWAA's Intergovernmental Agreement with WMATA and is a betterment.* The projected overruns in the estimated costs of the remaining Allowance Items (\$59M) and open Directive Letters (\$56M) indicate that there is an immediate need to replenish the project contingency. **Given the forecasted magnitude of the Allowance Items cost overrun coupled with the value of the open Directive Letters, the Project is, in the PMOC's opinion, on track to exceed the FFGA amount.**

The continuing impasse between DTP and MWAA regarding the monthly schedule updates and actual critical paths requires the top management of each group to focus on this matter and cease the claims posturing position of DTP. The schedule updates do not currently provide a clear picture of the project's progress. *It is the PMOC's opinion that the Project will be in revenue service within the FFGA specified date of December 1, 2014.*

The lack of a recovery schedule from Kawasaki to address the impacts of the earthquake and tsunami in March 2011 is of concern. The contractual delivery date for the 64th car already exceeds the FFGA ROD date, and the preliminary indications from Kawasaki of a six-month linear extension of the schedule will compound the problem.

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.

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.

In late 2010, discussions between MWAA and DTP were concluded at the executive level with regard to a recovery schedule. This effort resulted in the issuance of two "Directive Letters" to DTP to conduct a constructive acceleration effective December 15, 2010 on a time and materials basis not to exceed \$7 million. DTP submitted a zero loss recovery schedule on January 12, 2011 that included a preliminary acceleration cost of \$23.7 million. The schedule proposes a mitigation period of fourteen months, extending from January 2011 through February 2012. A detailed review and additional discussions led to MWAA's conditional acceptance of the Recovery Schedule via letter dated February 7, 2011. Both parties have agreed to work toward a lump sum Change Order based upon the agreed Recovery Schedule scope. MWAA completed their independent estimate and continues evaluating DTP's revised cost proposal for \$11.5 million submitted on March 2, 2011. MWAA expects to reach closure on this issue by mid September. On September 20th, MWAA reported that an agreement in principle had been reached for approximately \$7.2 million and the documentation is being prepared. In early September 2011, DTP submitted a new recovery schedule intended to recover the -188 days incurred since January 2011 and a new request for change proposal.

MWAA continues to monitor expenditures to date and to update the estimate at completion. Through *July 25, 2011*, MWAA has utilized \$176,915,998 of the Phase 1 through 5 allotted contingency of \$200,000,000. The contingency utilization reflects expended and obligated costs.

MWAA submitted an updated draft of the project Risk and Contingency Management Plan to the FTA on August 5, 2011. 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 *August 2011*, of the cumulative total of 6,950,534 hours worked there have been *three* lost time accidents. Revision 5 of the SCIL *has been reviewed and all comments have been resolved*. Final resubmission is expected in *September 2011*.

DTP submitted revisions to the System Safety/Security Management Plan 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 which MWAA accepted on December 6, 2010. The FTA and PMOC met with MWAA, WMATA and DTP on April 29, 2011 to discuss development of a revised SSMP to integrate WMATA and MWAA systems testing, interface management and pre-revenue operations. *WMATA has created a “Start-up Steering Committee” and has hired the Delcan Corporation to assist with that effort*. A follow-up *joint* meeting will be scheduled in *October 2011 to review progress made thus far*.

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 *second quarter* of 2011 on *July 29, 2011*.

2. Project Scope

a. Design Status

Except for the associated pedestrian bridges and pavilions, DTP completed design work with the receipt of permit approvals on the station designs with the exception of the associated pedestrian bridges and pavilions. Issued for Construction” (IFC) drawings for all five stations have also been completed. WMATA review and approval of ATC submittals continues to meet the needs of the project.

The associated station pavilion and pedestrian bridge designs are delayed to as late as December 2011. 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. However, the remaining design packages continue to accumulate negative float on the Project schedule.

b. Bidding and Construction Status

Through July 2011, \$305,294,501 of the \$437,278,511 Federal Allowance Items Budget had been awarded to subcontractors and suppliers, which reflects no change since May 2011. A \$44,748,673 overrun exists for the 22 of 35 sub-contract packages awarded thus far for federally-funded allowance items. In addition, MWAA has forecast a \$39+ million increase due to Station finishes and mechanical, electrical, and plumbing work in the next few months and an additional \$20+ million increase for WFCY allowances.

Utility relocation is 99% complete and DB construction is approximately 50% complete. Remaining utility relocation involves installation of traction power ductbank and manholes for bridge crossings along DIAAH from Route 7 to Route 267 and along the DCR between Route 123 and the K-Line.

The following are the major accomplishments of the DB contractor during August 2011:

- **Operations Areas OP-1, OP-2 and OP-3 (I-66/DCR/Laydown Area 1)** – Continued with retaining walls at the K-Line tie-in area. Completed preassembly of the No. 10 double crossover adjacent to the OB K-line tracks in preparation for the Labor Day installation. Continued installation of traction power and switch cables during non-revenue hours at the K-line. Continued storm drain installation between the O-1 guideway abutments and Idylwood Road. Continued constructing retaining walls in the median of the DCR between the O-1 guideway abutments and Idylwood Road. Completed placing sub-ballast and continued track drainage in the median of the DCR between Idylwood Road and Chain Bridge Road. Began staging rails between Magarity Road and the Tysons East Guideway abutment. Continued cable trough installations on the O-1 aerial guideway. Started track and plinth construction on the O-1 guideway. Completed shifting traffic on the EB DCR and started excavation and SOE at stage 2A of the WFCY cut and cover tunnel. Continued grading work at the stream restoration at the WFCY. Continued the jack and bore work for storm drains and conduits into the WFCY. Delivered and set the TPSS #1 and communications room modules and continue setting breakers inside. Continued installation of duct banks and vaults and building slabs at TPSS #2 and TBS #2. Continued the installation of duct banks and manholes at TCR #1. Started installation of cables and equipment in the existing Fisher Avenue TPSS.
- **Operations Area OP-4/5A (Tysons East Guideway/Station/I-495 Crossing)** – Continued segmental box girder guideway erection with Truss LG1 completing span 31-OB, 37-OB and 37-IB for a total of sixty-two spans completed to date. Continued disassembly and removal of Launching Girder Truss LG3 that was damaged in an accident on July 25th. Continued trackwork installation of the No. 10 double crossover between piers 20 and 22. Continued guardrail and miscellaneous direct fixation (DF) trackwork installation on the OB and IB trackway. Started track plinth construction work west of the No. 10 double crossover.
- **Operations Area OP-5 (Tysons Central 123 Station)** – Continued form and rebar installation and pouring structural foundation walls and interior columns. Continued

form and rebar installation for the track deck on AASHTO girders between spans 73 and 75.

- **Operations Area OP-6 (Laydown Area #6/NATM Tunnel/East Cut & Cover and Ventilation Structure)** – *Completed forming, rebar installation and pouring walls for the East Ventilation Structure. Continued pouring safety walk in IB tunnel. Continued pouring arch sections in the IB tunnel completing fifty-four arch sections to date. Completed non-destructive testing on arches in OB tunnel. Started contact grouting at OB tunnel.*
- **Operations Area OP-6 (West Cut and Cover Tunnel)** – *Completed Support of Excavation (SOE) installation and excavation at stage 2A. Continued with the invert slab, wall and roof construction. Continued with the wall construction at the West Ventilation Structure.*
- **Operations Area OP-7 (Tysons Central 7 Station)** – *Continued pouring foundation walls for TPSS #5. Continued forming and pouring platform walls and platform slab. Continued form, rebar installation and pouring station columns.*
- **Operations Area OP-8 (Tysons West Station/Guideway)** – *Water main installation along WB Route 7 continues between Spring Hill Road and Tyco Road. Completed columns at IB/OB piers 37, 38 and 39 for a total of sixty-seven completed to date. Continued segmental girder erection with Truss LG2, completing spans 2-IB, 3-IB and 3-OB for a total of six completed to date. Continued balanced cantilever segmental erection for spans 5, 6 and 7 with a ground based crane. Completed pier caps at piers 19-IB/OB, 25-OB, 25-IB, 26-OB, 26-IB, 34-IB/OB, 45-IB/OB, 40-IB/OB, and 41-IB/OB for a total of forty-six completed to date. Continued erecting mezzanine steel framing at the Tysons West Station. Completed construction of straddle bent 48 over the Dulles Toll Road. Started construction of straddle bent 42 over east-bound Route 7.*
- **Operations Area OP-9 (DIAAH)** – *Continued waterproofing of the Difficult Run Bridge deck. Continued with retaining walls on the OB and IB sides between Hunter Mill Road and east of Trap Road. Continued storm drain installation and retaining wall construction east of Trap Road in the median. Continued jack and bore, ductbank and vault installations for TPSSs #7, #8, #9, #10 and #11. Installed SOE and started excavation for grounding grid at TPSS #10. Started installation of cable troughs between Hunter Mill Road and Difficult Run.*
- **Operations Area OP-10 (Wiehle Avenue Station/Laydown Area 13)** – *Continued installation of conduits and piping in the platform utility chase and through penetrations into the service rooms. Continued construction of precast service rooms at the west end of the station. Continued fireproofing of structural steel. Started installation of pre-cast beam covers.*
- **Laydown Area 10 (Pre-cast Yard)** - *Continued casting of segmental box girders; completed 2,603 of 2,772 concrete box girder segments and station girders to date.*

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 August 2011, 82 of the 102 parcels required for the Project have been acquired. The table below summarizes acquisition activities for the Project through August 2011.

PARCELS ACQUIRED¹
(Number of parcel packages)

LOCATIONS	TOTAL	Period			To Date		
		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	19	(4)
Route 7	51	0	2	2	51	49	(2)
DIAAH	27	6	0	(6)	27	13	(14)
TOTAL	102	6	2	(4)	102	82	(20)

- Notes: 1. Parcels acquired through recordation of deed/easement and filing of Certificates of Take. These values include rights obtained for another 31 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-four parcel packages have been obtained with the filing of twenty-nine Certificates of Take. In August 2011, two recently filed cases were assigned to fee attorneys, one case was reported as having the Final Order entered for Agreements After Certificate in May 2011 (Parcel 32, 8500 Office Building/CDC, LP), and two cases continued to move toward having the Final Order entered (Parcel 35, Embassy Suites and Parcel 36, Container Store/CG Tysons Corner, LLC). There is one case currently scheduled for trial that appears to be headed toward settlement.

e. Utility Coordination

The remaining 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 and continuing through August 2011 includes the following:

- **Dulles Connector Road (DCR) East – (K-Line to Route 123)** – Continue installation of ductbanks and manholes east of Idylwood Road. Continued installation of traction power ductbank adjacent to the WFCY cut and cover tunnel.

- **Route 123 (DCR to Route 7) - AboveNet completed splicing and cutover work at Route 123 and Scotts Crossing.**
- **Route 7 (Spring Hill Road to Tyco/Westwood) – AboveNet continues to prepare for splicing and cutover work on the north side of Route 7.**
- **Route 7 (Tyco/Westwood to Route 267/Toll Road) – AboveNet continues to schedule splicing crews and customer notifications on the north side of Route 7 at Koon’s Toyota.**
- **DIAAH West -- (Route 7 to Wiehle Avenue) – Continue installation of the traction power ductbank and manholes for bridge crossings. Washington Gas continues design work for the relocation work at the TPSS #10 site. Completed with manhole conduit re-configurations for DVP to pull cables.**

f. 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 Notice-To-Proceed (NTP) until August 16, 2010. Thus, the contract indicates that the 64th rail car would be conditionally accepted on January 15, 2015 as an early completion date, which does not comply with the FFGA date of December 1, 2014. The contractual milestones for this procurement are:

Activity	Planned Date	Actual Date
Notice to Proceed	July 12, 2010	August 16, 2010
Preliminary Design Review Submission	March 31, 2011	continuing
Preliminary Design Review Complete	May 1, 2011	continuing
Approval of Master Test Plan	August 23, 2011	<i>Development continues</i>
Approval of A-Car Mock-up	October 24, 2011	
Final Design Review Submission	October 31, 2011	
Final Design Review Complete	December 1, 2012	
Carbody/Truck First Article Inspection Approval	March 30, 2012	
Delivery of 4 pilot cars	September 16, 2013	
Conditional acceptance of 4 pilot cars	March 16, 2014	
Conditional acceptance of 64 th car	January 15, 2015	

- WMATA, MWAA, and the PMOC held a kick-off progress status meeting on October 28, 2010 to begin monitoring this procurement. The PMOC also attended the Monthly Progress Review meetings held between WMATA and Kawasaki on February 10, 2011, March 3, 2011, April 14, 2011, June 9, 2011, July 14, 2011, and August 11, 2011. *The September 8, 2011 WMATA/Kawasaki Progress Meeting was canceled and no new schedule changes have*

been received. However, WMATA is making a field trip to Japan in mid-September 2011 to check on the earthquake/tsunami impacts and Kawasaki's ability to mitigate the contract delays.

The Conceptual Design Review phase was completed on January 31, 2011 and the program is in the Preliminary Design Review phase. This is behind WMATA's original schedule, however WMATA has noted that the submittals are more detailed than expected, being closer to what is expected for Preliminary Design Review (PDR). As a result, some level of PDR work has already taken place and the design development is proceeding at the expected rate. At the March 3, 2011 WMATA/Kawasaki Progress Meeting it was reported that Kawasaki anticipated completing PDR submittals on May 3, 2011 which was two days behind the accepted schedule completion date for PDRs. Kawasaki reported that as of May 16, 2011, Toshiba relocated two project managers to Kawasaki's Yonkers, NY facility to help reduce the backlog of submittals. Since travel to Japan *was* prohibited, WMATA is doing the PDRs at WMATA's headquarters. PDRs for trucks and train wayside communication are outstanding. WMATA's current expectation is that the PDRs will be completed *at the end of October 2011, six months past the baseline schedule date.*

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 of March 11, 2011. The major impact appears to be relative to Toshiba, which is located in a zone that is only receiving power for half a day. This loss of production is exacerbated by the fact that Toshiba must recalibrate their equipment after each outage, which further reduces productive time. Toshiba reports that two of their suppliers for semi-conductors and capacitors have been affected and is seeking other sources for these materials. Toshiba is attempting to relocate key personnel to Houston, TX. The software delays may have a trickledown effect on other manufacturers that are reliant on the Toshiba software. Kawasaki and Toshiba were to present a recovery schedule to WMATA during the week of April 18, 2011. That meeting did not take place until April 27, 2011. A mitigation schedule was not presented at that meeting, but rather another meeting was scheduled to occur in the following thirty to forty-five days, when the full impact of the disaster could be quantified. This meeting was scheduled for June 9, 2011 but Kawasaki again failed to provide a revised schedule. Instead, Kawasaki reported that they anticipated providing their revised schedule that would reflect the Toshiba delays and mitigation efforts to WMATA in late June. Kawasaki reported that they had received Toshiba's recovery schedule but neither completed their analysis nor incorporated it into the overall project recovery schedule. MWAA reported that WMATA received a schedule on July 1, 2011 reflecting a five-month delay, which WMATA rejected because only Toshiba's reported delays were included. WMATA subsequently received a schedule update that included all subcontractor delays and indicated a linear six-month overall delay. WMATA rejected that schedule and directed Kawasaki to develop a schedule with the intent of mitigating the delays.

On December 3, 2010, WMATA confirmed in a letter to MWAA "sufficient resources including railcars will be available to support dynamic testing and initial revenue service in accordance with the Project's current schedule." WMATA went on to say that cars from the existing fleet will be made available for dynamic testing on the Dulles Extension. If there is a gap in the delivery of the 7000 Series Rail Car delivery and revenue service date, WMATA

outlined its strategies for being able to support initial revenue service using the existing WMATA fleet.

The PMOC will continue to monitor both the progress of the procurement and WMATA's support of the project.

g. Safety and Quality Status

MWAA participated in *four* safety walk downs with DTP during the month of *August*. All were related to Design-Build work. As of *August 31, 2011*, DTP had logged 6.950 million project man-hours with 281 first aid cases and *three* lost time cases. (*Two previously reported lost-time injuries were re-classified as recordable.*) There have been a total of 460 incident investigation reports, 81 utility hits and 15 vehicular accidents. MWAA reported that "Although the DTP Construction Safety Program continues to perform satisfactorily, the Airports Authority has concerns related to the number of construction-related first-aid cases being experienced by DTP and the staffing level of the DTP construction safety organization."

Revision 5 of the SCIL was received by MWAA on March 31, 2011 and MWAA responded with comments to DTP on May 18, 2011. All comments were resolved on August 2, 2011 and DTP anticipates resubmission to MWAA *in mid September, 2011*.

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 have expressed concern with the lack of progress on both the DCC and CCC submissions. *WMATA wrote a letter to MWAA dated August 26, 2011 stating that "The lack of progress by the Design-Build Contractor on the SCIL design and construction sign-offs therefore puts at risk for delay both the timely completion of WMATA's independent review of the SCIL, as well as the currently projected dates of Substantial Completion and revenue operations."* MWAA in turn wrote to DTP on August 31, 2011 stating that it is "very concerned with the lack of progress" and further directed that DTP "meet with the Airports Authority, no later than September 14, 2011, to describe the actions being taken by DTP to complete the Design Conformance Checklist in an expeditious and error-free manner and to ensure that the completion of the Construction/Procurement/Installation Checklist also proceeds in a timely manner."

DTP submitted DCC No. 6 on June 2, 2011 with 540 signed off items. This submission was returned to DTP due to missing checklist sign-off item reference criteria. *DTP resubmitted No. 6 on August 22, 2011 with 563 sign-off items. It is currently under review.*

Construction/Procurement/Installation Conformance Checklist (CCC) submittal No. 3 was received on July 11, 2011 *with only three sign-off items. CCC No. 3 was not accepted by MWAA and was returned to DTP due to insufficient information.* WMATA is also currently conducting a 100% review of the submitted DCC and CCC items.

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. A SCWG meeting was held on *August 16, 2011*.

Revision 5 of the DTP System Safety/Security Certification Management Plan was transmitted to the FTA on December 8, 2010. MWAA's Safety and Security Management Plan, Revision 8 was submitted 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 -- not just for the MWAA portion. MWAA and WMATA agreed to develop a revised SSMP that will cover the roles and responsibilities of both MWAA and WMATA for this project -- including the vehicles, the approach for integrated testing and interface management, joint safety and security certification activities and hand-offs, and pre-revenue operations. WMATA will also determine how it will manage its role in the safety and security certification process and identify and develop the required plans or procedures. MWAA and WMATA plan to hold bi-weekly meetings to address these issues. Another meeting will be held with FTA *in early October 2011* to present the approach they developed and also to clarify what documentation FTA will need. The April 29th meeting was productive, and in the PMOC's opinion, both MWAA and WMATA appreciate the importance of resolving these issues and are on the right track to having a meaningful proposed approach ready for presentation by the end of September 2011. MWAA reported that WMATA has hired Delcan Transportation, Inc. to review all of the quality work done on the project and to develop a WMATA Project Acceptance Plan and Procedure. MWAA/QA met with Delcan on June 21, 2011 to discuss the effort.

During *August 2011*, MWAA performed the following QA audits/surveillances:

- *Long Fence: A surveillance was conducted on August 2, 2011. There were no issues and the audit is closed.*
- *Rizzani (unscheduled): An audit was conducted on August 8, 2011. There were three minor observations. The purpose of the audit was to address the issue where Rizzani sent a segment that had been rejected to the site rather than a new segment. The audit verified that Rizzani had taken appropriate action to ensure that no additional rejected segment would be sent to the site for installation.*
- *DTP Contractors and Subcontractors Safety Program: An audit was conducted on August 17, 2011. There were six issues regarding training, the need to maintain adequate safety staffing and a failure to conduct an incident investigation. A response is due in mid September.*

The MWAA QA Audit and Surveillance Schedule through December 2011

<i>TENTATIVE DATE</i>	<i>AUDIT (A)/ SURVEY (S)</i>	<i>ORGANIZATION/ACTIVITY</i>	<i>JOINT AUDIT/ SURVEY</i>	<i>LEAD</i>
<i>TBD</i>	<i>S</i>	<i>Truland Walker Seal (Communications)</i>	<i>Y</i>	<i>DTP</i>
<i>9/14-15/11</i>	<i>A</i>	<i>DTP Environmental</i>	<i>N</i>	<i>MWAA</i>
<i>9/14-15/11</i>	<i>A</i>	<i>MWAA QA Program (Internal)</i>	<i>N</i>	<i>MWAA</i>
<i>TBD</i>	<i>A</i>	<i>DTP Engineering Difficult Run Bridge Design Calculations</i>	<i>N</i>	<i>MWAA</i>
<i>9/21-22/11</i>	<i>A</i>	<i>Lane Construction (Early MEP)</i>	<i>Y</i>	<i>DTP</i>
<i>9/28/11</i>	<i>S</i>	<i>DTP Subcontractor/Supplier Submittal Process: DTP/Subcontractor Nonconformance Control Systems</i>	<i>N</i>	<i>MWAA</i>
<i>10/5-6/11</i>	<i>A</i>	<i>Turner Construction (Shell Enclosure Trades)</i>	<i>Y</i>	<i>DTP</i>
<i>10/12-13/11</i>	<i>A</i>	<i>DTP Engineering</i>	<i>N</i>	<i>MWAA</i>
<i>10/26-27/11</i>	<i>A</i>	<i>CTI Consultants (Special Inspection Program)</i>	<i>N</i>	<i>MWAA</i>
<i>11/9-10/11</i>	<i>A</i>	<i>Kone (Elevators and Escalators)</i>	<i>Y</i>	<i>DTP</i>
<i>11/16-17/11</i>	<i>A</i>	<i>DTP QA, Document Control, Training</i>	<i>N</i>	<i>MWAA</i>
<i>12/5-6/11</i>	<i>A</i>	<i>Delta Railroad (Trackwork)</i>	<i>Y</i>	<i>DTP</i>
<i>12/12/11</i>	<i>S</i>	<i>DTP Subcontractor/Supplier Submittal Process: DTP/Subcontractor Nonconformance Control Systems</i>	<i>N</i>	<i>MWAA</i>

3. Project Management Plan and Sub-plans

MWAA submitted its draft PMP update of Version 7.0 on September 3, 2010. This plan was reviewed by the PMOC and six recommendations were made for inclusion in the PMP. FTA forwarded the PMOC's comments to MWAA for them to address in Version 7.0 Final. Dialogue continued between MWAA and the PMOC with regard to MWAA's proposed revisions relative to the six recommendations and the revised PMP was submitted to the FTA on January 25, 2011. On February 11, 2011, the PMOC recommended that the FTA approve PMP Version 7.0 Final dated January 2011. The FTA accepted the PMP Version 7.0 Final on February 14, 2011.

- The FTA accepted MWAA's Quality Program Plan (QPP), Revision 6, dated June 25, 2008 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 April through June 2011.

- 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 was reviewed and accepted by the FTA. The PMOC requested MWAA to begin the process to update the RMP by the end of the summer 2010 with a meeting to discuss the update to be scheduled after MWAA completes their risk plan update. A consultant submitted a draft of the Risk Analysis, a primary component of the RMP, to MWAA in December 2010. MWAA and the PMOC discussed the draft on January 26, 2011 and determined that some refinements were needed. MWAA submitted a hard copy draft Risk Assessment (Analysis) Report on January 31, 2011 and an electronic copy for review on February 24, 2011. The FTA and PMOC requested that the Report be revised. The PMOC provided guidance to arrive at an acceptable reformatting. The PMOC reviewed MWAA's updated risk assessment dated April 15, 2011. The FTA and PMOC met with MWAA on May 3, 2011 to discuss the PMOC's review comments. It was decided that the assessment needed adjustment to accurately reflect the changing realities of the Project, to include an analysis of what the potential Kawasaki 7000 series cars delay will have on the Project schedule and FFGA completion date. MWAA decided that it would do an internal revision to the Draft Risk Assessment and would communicate adjustments and progress on a bi-weekly basis with the PMOC. MWAA submitted a draft "Risk and Contingency Management Plan" on June 3, 2011. The PMOC provided comments to MWAA on July 5, 2011. A meeting to discuss the comments was held on July 6, 2011. MWAA edited the Plan and resubmitted it on August 5, 2011. *MWAA and the PMOC met again on September 7, 2011 and discussed the relevancy of the "Proposed Top Ten Risks" and relevancy of the milestones listed on Table 3-1. Some changes were discussed that will be included in an informal e-mail submittal during the second week in September for further review and comment. The PMOC will meet with MWAA on the RCMP after the October 4th monthly update meeting and anticipates that MWAA will submit the revised RCMP by the end of October.* MWAA continues to monitor the risk status and reports this information on a monthly basis.
- 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 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 submitted the revised draft RFMP on September 17, 2010 and a draft Spot Report summarizing the PMOC's review findings was issued to the FTA on November 8, 2010. The PMOC held a meeting with WMATA on November 15, 2010 to review the findings. The PMOC reviewed the RFMP dated January 31, 2011 and recommended that the FTA not accept the document. On March 1, 2011, the

FTA Regional Administrator requested that WMATA revise and resubmit the RFMP. WMATA hired a consultant to prepare the revised RFMP. WMATA submitted the revised RFMP (*Rev. 3D*) dated July 27, 2011 to the FTA on July 29, 2011; the FTA and PMOC reviewed this version and FTA forwarded comments to WMATA on August 24, 2011.

- 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. MWAA submitted SSMP Revision 8 to the PMOC for review on February 28, 2011. On April 29, 2011, the PMOC, MWAA, WMATA, DTP and TOC met to review the SSMP, Safety Certification Program and other issues. MWAA and WMATA agreed to develop a revised SSMP that will cover the roles and responsibilities of both MWAA and WMATA for this project -- including the vehicles, the approach for integrated testing and interface management, joint safety and security certification activities and hand-offs, and pre-revenue operations. WMATA will also determine how it will manage its role in the safety and security certification and identify and develop whatever plans or procedures are required. MWAA and WMATA plan on bi-weekly meetings to address these issues. Another meeting will be held with FTA in early October 2011 to present the approach they developed and also to clarify what documentation FTA will need.

4. Project Schedule

The most recent MWAA analyzed project schedule update has a data date of July 25, 2011. The primary critical path identified by DTP showed a -188 day loss as compared to the -89 calendar loss reflected in the June 25, 2011. *DTP states that these losses are attributable to "the cumulative result of past and current issues that have now resulted in the Critical Path originating with the TPSS 10 Facility." These issues move the forecast SSCD to February 13, 2014, with a projected ROD of June 19, 2014. The FFGA ROD is December 1, 2014. MWAA has been requesting corrections and re-submittals of DTP's schedule updates when it disagrees with the critical path. However, DTP does not honor those requests. The contract regarding schedule control is ambiguous and lacks a clear ability to enforce changes. That leaves MWAA with only one option which is to contest and correct the monthly schedule update. MWAA rejects each schedule in writing identifying the correct critical paths and rejecting the claimed delays.*

DTP's schedule with a data date of August 25, 2011 reflecting a -194 calendar day variance to the plan is currently being analyzed by MWAA. The PMOC believes that this -105 day increase since the June 25 schedule is a tactical posturing move by DTP to argue costs associated with a mitigation schedule and RFC that was submitted on September 6, 2011 that is intended bring the SSCD back to August 9, 2013. *Discussions on the newest mitigation schedule and associated RFC have begun. RFC Option one is proposed at \$45.3 million and Option two is proposed at \$36.9 million. MWAA reported that the primary driver to the delays and claimed increased costs are associated with the TPSS and ETS Remote Monitoring System Changes requested by WMATA. They will begin their review and will share the documents with the FTA and PMOC.*

On February 12, 2011, Launching Gantry No. 2 (LG2) suffered structural damage during the launching operation to the next pier. To help mitigate delays, the Contractor sent the LG2 crew to the LG1 operations to operate a second shift. In addition, the contractor mobilized a ground-based crane, assembled girder segments on the ground and lifted them into place. The gantry crane was repaired and back in service on April 4, 2011 after seven weeks down time. MWAA and DTP have yet to agree on the overall schedule impacts. Launching Gantry No. 3 (LG3) also suffered structural damage on July 25, 2011 and is no longer usable. DTP is dismantling the gantry, which *was* completed in early September. It is expected that the remaining sixteen segments will be placed by ground-based cranes. The schedule impacts are not yet known.

In the *July 2011 Schedule Update*, DTP submitted notice of an additional two weather days bringing the total to 30 weather days to date. Nine of these were contractually anticipated and accounted for in DTP's work plan and DTP later retracted their position for three days. MWAA assessed seven of the remaining 16 days as excusable and debited it to the 45-day Force Majeure reserve included within the terms of the A&R D-B contract, adjusting the SSCD to August 9, 2013. The remaining *eleven* days remain in dispute. MWAA is formalizing the effects of these excusable days by issuing Minor Change Orders (MCO) and/or letters, as appropriate.

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

The DTP WFC Yard upgrade work schedule lost -7 days, with a completion of the full facility shown to be *April 24, 2014* according to the *July 25* schedule update, which is still disconnected from the Project schedule's critical path. MWAA continues to state its disagreement with DTP's completion date in light of the incomplete WFCY scope. *However, MWAA reported that DTP has submitted a recovery schedule for the WFCY with a completion date December 31, 2013. However, MWAA's own schedule analysis shows that the WFCY could be completed by October 30, 2013. Negotiations on this WFCY schedule are on-going.* DTP continues to progress the WFCY upgrade and DCMP tie-in design build effort on a "time and material" basis in accordance with MWAA issued directive letters. MWAA's position has been that DTP's completion date is incorrect in light of the questionable portrayal of the WFCY scope. The PMOC is in agreement that completion of the WFCY could be accomplished in the third or fourth quarter of 2013 as historically demonstrated with the upgrade of WMATA's Shady Grove Yard which was a larger and more complex upgrade. MWAA states that a large portion of the WFCY construction is being accomplished as "Allowance Items" which also presents the opportunity to include subcontract completion dates in the RFP's that supports the Project ROD. MWAA reported that they have proposed managing the work and the interface activities with WMATA. DTP was in favor of the proposal and the details are still being worked out.

DTP has made numerous presentations of its West Falls Church Yard Tie-In Execution Plan to MWAA and WMATA. All partners continue to cooperate and support the yard upgrade work and the related tie-in and integration process of the WFCY to the DCMP. MWAA, WMATA and DTP continue to discuss and refine DTP's Tie-in Plan and proposed track outage plan. DTP awarded a subcontract to Lane Construction Company in December 2010 for early Civil Sitework that began in mid-January 2011. The clearing and grubbing was completed and the backfill of the area within the loop tracks that will accommodate the building of the S&I Shop and new storage tracks continues as does the stream restoration and storm water management

work and box tunnel tie-in work. In addition, MWAA has issued a change order to Lane Construction for the WFCY early utility work.

The WFCY Civil/Sitework final design was completed and issued for permit in October 2010. The S&I Building Issued for Permit (IFP) drawings were submitted for permitting to DGS on May 2, 2011. The Sound Cover Box IFP drawing submission to DGS for permitting occurred on May 18, 2011 and DGS issued a permit on September 7, 2011. A Request for Proposal (RFP) for both the Annex and Sound Box was issued to prospective bidders on May 10, 2011 and addendums were issued for DGS generated changes on June 20, 2011. A bid opening took place on July 7, 2011 with four bidders (Patchen, Whiting Turner, Lane and Facchina). DTP made a recommendation to award to MWAA that is *still* under review. *MWAA and WMATA are currently discussing mitigation options to the budget overruns that may include not building the S&I Shop.*

It remains the PMOC's opinion that MWAA is vigorously pursuing control over the Project master schedule, but with limited cooperation from DTP. MWAA reports progress with the WFCY schedule disagreements in that they are nearing a cost settlement with DTP that yields a WFCY completion date that supports the Project ORD. However, the DCMP mainline schedule continues to be problematic. It appears to the PMOC that little to no progress is being made on schedule agreement. MWAA is analyzing DTP's August 25, 2011 schedule reflecting a -194 calendar day variance to the plan. It appears to the PMOC that this -105 day increase since June 25 is a tactical posturing move by DTP to argue costs associated with yet another mitigation schedule and RFC that *they submitted on September 6, 2011* that will bring the SSCD back to August 9, 2013. The PMOC believes that, for the *third* consecutive month, DTP is blatantly misusing the schedule for claim posturing purposes instead of tracking real time progress and accurate completion projection. Although it would appear to the PMOC that losses portrayed in the schedule updates are recoverable, the continuing inability of DTP and MWAA to come to agreement on costs for the acceleration to buy back the -113 days that accrued as of December 2010, and address the -194 days subsequently accrued according to DTP, puts the contract completion date in serious jeopardy. *However, the PMOC feels that the project can be completed before the FFGA ROD.*

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

- *Potential conflict between the segmental box girder erection over I-495 and the on-going Hot Lanes work in the area.*
- Re-casting of damaged or otherwise unacceptable segments.
- WFCY design, construction and commissioning (currently separate from the Project SSCD).
- Implementing the Remote Monitoring and Control (RMC) modifications pursuant to Directive Letter 27.
- Other potential systemwide upgrade programs requested by WMATA could have numerous technical scope changes affecting Traction Power, Automatic Train Control, and Communications.
- *DTP's non-performance in meeting recovery schedule dates in Stations and Aerial Guideways causing delays to Delta's access.*
- *DTP's non-performance in heavy civil construction like the installation of retaining walls, ductbanks and manholes, jack-and-bore operations project-wide are causing delays to Delta's access.*

- Downtimes associated with the two Launching Girder accidents/damage and DTP's lack of resources to address these efficiently.
- Potential delay to delivery of the 64 Rail Cars for Phase I.

a. Critical Path Evaluation

The Project continues to be managed utilizing the work plan set forth in the Recovery Schedule with a data date of December 25, 2010. In the July 2011 Schedule Update, the primary critical path, Washington Gas Utility Relocation Conflict at the TPSS #10 reflected a -188 calendar day delay yielding a SSCD of February 13, 2014. The critical path, as described by DTP, originates with Flippo's (DTP subcontractor) design finalization and installation of SOE in support of relocating the Washington Gas pipeline at the periphery of the TPSS #10 site. This needs to be completed before the base slab for TPSS #10 can be installed, which drives the field installation of TPSS #10. This is followed by the sequential installation of the Communications Room and Equipment starting at the TPSS #10 site and continuing through to the TPSS #7 location. Fiber Optic cables are installed after the Communication Room fit-out is complete, which leads to Supervisory Control & Data Acquisitions (SCADA) tests and Communications tests. Completion of these tests, directed by DTP in coordination with WMATA, leads to full systems performance demonstration and Project completion. MWAA disagreed with DTP's critical path.

MWAA disagreed with DTP's plan, as presented in the June 2011 schedule update and requested DTP to expedite the design approval and construction of the SOE to protect the gas lines. MWAA prepares and presented an alternative plan to DTP, which they accepted. However, DTP failed to incorporate this plan into the July 2011 schedule update and thus forecasts a completion date for the slab that delays this path by 74 calendar days. In addition, DTP unilaterally added approximately 110 calendar days to this path, claiming additional time needed for the Communications Room equipment field installation, and for the follow-on SCADA tests as a result of the Remote Monitoring Change requested by MWAA. Also, DTP's July 2011 update does not present accurate forecasts for activities that were in-progress during this period. This path shows MWAA's approval of Flippo's SOE design incorrectly being delayed by 20 calendar days in this update period. This inaccuracy adds a 27 calendar day delay to this path. DTP's schedule also sequences the work linearly based on crew deployment when the activities can be performed concurrently.

In addition, MWAA takes exception to DTP's schedule for the WFC Yard. As submitted, it now reflects a completion date of April 24, 2014. The Project team, in coordination with DTP, discussed and accepted portions of the schedule whereby the S&I Building is substantially complete by May 2013 followed by the Stinger System and Traction Power Systems installation and testing by September 2013. MWAA also accepted DTP's proposed schedule for trackwork subject to DTP's trackwork subcontractor's (Delta) acceptance. The critical path is through the Annex Building structural steel erection, which must be completed prior to commencing any trackwork in the Storage Track Area. As to the balance of the schedule, the Project team has met with DTP, and the parties are working together to define a detailed schedule for the final systems interconnection, testing and commissioning of the yard improvements in order to finalize the agreement. A schedule developed by MWAA indicates that completion of the WFC Yard is feasible by the end of October 2013. Also, a large portion of the WFC Yard construction is being accomplished as Allowance Items

which presents the opportunity to make Recovery Schedule scheduled completion a requirement for prospective bidders. The allowance items C-3 for the WFCY sound box and C-12 for the WFCY S&I Building were advertised on May 10, 2011 and bids were received on July 7, 2011. The PMOC believes that DTP continues to cite the WFC Yard schedule erroneously as having significant constraints and unresolved stakeholder issues.

The PMOC agrees with MWAA’s assessment regarding the critical path. The Project will need to continue its efforts to finalize agreements relative to the WFCY, the mainline critical path, logic and delay issues in order to minimize the risk of irretrievable schedule creep leading to additional schedule compression and a costlier constructive acceleration. Although MWAA and DTP have agreed to a zero loss time recovery schedule with a data date of December 25, 2010, new disagreements continue to mount for claimed weather delays and change order impacts to the schedule. The project has now passed its half way point in the schedule and therefore these ongoing and new issues have increased in criticality.

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

MILESTONE	June 2008 Baseline Schedule	December 2010 RECOVERY SCHEDULE	June 2011	July 2011
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 ¹	02/18/11 ¹	08/01/11	08/24/11
Utility Relocation Complete	03/05/10 ¹	09/13/11	11/08/11	12/07/11
Aerial/Station Foundations Complete	3/4/11	09/01/11	07/29/11	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	06/11/12	06/11/12
Guideway Complete	2/12/12	09/13/12	08/07/12	08/27/12
Train Control Complete	10/26/12	10/29/12	11/29/12	12/18/12
Substantial Completion	07/31/13	07/31/13	11/06/13	02/13/14
Revenue Operations - Target	11/27/13	01/20/14	03/12/14	06/19/14
FFGA Revenue Operations	12/01/14	12/01/14	12/01/14	12/01/14

^A Actual Date

¹ Date was not met.

b. Important Activities – 90-Day Look Ahead

The important milestones scheduled for the next 90 days include:

- Completion of station’s pedestrian bridges and pavilions designs.
- Completion of utility relocation.
- Property acquisitions for the Tysons West Aerial Guideway (OP-8).
- Property acquisition for Operations Area 9 and 10.

5. Project Cost

The SCC Budget and Expenditures summary for the period ending *July 25, 2011* is as follows. Overall, approximately 44% of the budget 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	\$ 648,127,849	\$ 374,486,174	\$ 648,127,849
20	Stations	\$ 317,023,979	\$ 294,970,838	\$ 83,177,953	\$ 294,970,838
30	West Falls Church Yard	\$ 51,789,539	\$ 49,928,014	\$ 3,889,743	\$ 49,856,383
40	Site Work & Utility Relocation	\$ 232,936,987	\$ 234,642,404	\$ 178,113,773	\$ 260,540,217
50	Systems	\$ 278,157,645	\$ 297,984,463	\$ 60,275,050	\$ 295,245,932
60	Right of Way Acquisition	\$ 45,953,303	\$ 67,631,026	\$ 53,493,118	\$ 66,295,154
70	Vehicles	\$ 211,629,775	\$ 211,629,775	\$ 20,825,600	\$ 210,926,012
80	Professional Service	\$ 698,471,472	\$ 719,396,941	\$ 558,351,499	\$ 773,946,668
90	Contingency Mgmt. Reserve	\$ 130,000,075	\$ 108,175,753	\$ -	\$ 32,578,010
100	Finance Charge	\$ 509,984,571	\$ 509,984,571	\$ 47,799,694	\$ 509,984,571
TOTAL (Federal portion)		\$ 3,142,471,634	\$ 3,142,471,634	\$ 1,380,412,603	\$ 3,142,471,634

1) Current budget equals FFGA amount plus approved Change Orders CO-001-081, 083-086, Directive Letters 001-030, UR-CO-001-033 & 039.

2) Estimate at Completion (EAC) for Contingency reflects the amount approved for utilization per PM-5.07.

a. Explanation of Variances

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

1. SCC10 – Guideway and Track Elements has been reduced approximately \$17 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 \$19.2 million due to the decision by the Airports Authority to remove the Wiehle Avenue Parking Garage – Allowance Item C-2. In doing so, \$29.1 million was transferred 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 additions being the transfer from the tunnel subcontract.
3. SCC40 – Site work and Utility Relocation has been increased by approximately \$24.6 million as a result of a combination of change events (change orders, directive letters and scope transfers) and forecasted overruns. The forecast adjustments are predominantly due to cost overruns in utility relocations.
4. SCC50- Systems has increased by \$16.6 million due to additional WMATA requirements for Traction Power Remote Monitoring, Emergency Trip Station/Amber Light Warning System and requirements for Communications.
5. SCC60 – Right of Way Acquisition experienced nearly \$20.3 million increase in the right-of-way (ROW) acquisition that was primarily due to the adjustment of project cost for the revised federal/non-federal split.

6. SCC80 – Professional Services increased approximately \$71.0 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 a forecasted cost overrun of soft costs including MWAA, PMSS and VDOT. In addition, WMATA budget transfers are treated as forecast adjustments.
7. SCC90 – Contingency Management Reserve estimate at completion of \$32,578,010 is available for future use. *The PMOC is of the opinion that the contingency reserve need to be increased based on the current status of the contract and potential overruns for Allowance Items.*

b. Monthly Cost Report, July 2011

Table 8 - Monthly Cost Report, July 2011

DESCRIPTION	FFGA AMOUNT (Original)	EXPENDITURE TO DATE ¹	ESTIMATE TO COMPLETE	ESTIMATE AT COMPLETION	PERCENT OF EAC EXPENDED TO DATE
FEDERAL (FFGA SCOPE)					
Design-Build					
Firm Fixed Price	\$ 1,112,052,172	\$ 850,894,056	\$ 654,877,995	\$ 1,505,772,051	
Firm Fixed Price Insurance and Bonds	\$ 65,109,408	\$ 66,430,003	\$ 2,973,922	\$ 69,403,925	
Firm Fixed Price Subtotal	\$ 1,177,161,580	\$ 917,324,059	\$ 657,851,917	\$ 1,575,175,976	
Subcontract Allowance	\$ 430,199,817		\$ 159,138,674	\$ 159,138,674	
Design-Build Contract Prices	\$ 1,607,361,397	\$ 917,324,059	\$ 816,990,591	\$ 1,734,314,650	
Indexed Commodity Escalation	\$ 77,469,926	\$ -	\$ 51,915,794	\$ 51,915,794	
Design-Build Contract Total	\$ 1,684,831,324	\$ 917,324,059	\$ 868,906,385	\$ 1,786,230,444	51%
Utility Relocation					
Utility Work	\$ 84,312,807	\$ 95,124,512	\$ 11,675,983	\$ 106,800,495	
Terf Tax		\$ -	\$ 0	\$ 0	
Project Management and Final Design	\$ 8,423,426	\$ 18,155,696	\$ 1,040,715	\$ 19,196,411	
Utility Relocation Total	\$ 92,736,233	\$ 113,280,208	\$ 12,716,698	\$ 125,996,906	90%
Right of Way					
Right Of Way Total	\$ 42,443,132	\$ 53,755,269	\$ 13,164,885	\$ 66,920,154	80%
WMATA Agreement					
Vehicles	\$ 195,138,329	\$ 20,825,600	\$ 173,608,966	\$ 194,434,567	
Construction and Procurement	\$ 31,484,799	\$ 1,794,832	\$ 26,833,038	\$ 28,627,870	
WMATA Force Account Startup	\$ 13,777,100	\$ 1,265,653	\$ 12,139,368	\$ 13,405,021	
Project Management and Final Design	\$ 31,235,400	\$ 12,779,930	\$ 22,388,241	\$ 35,168,171	
WMATA Agreement Total	\$ 271,635,628	\$ 36,666,016	\$ 234,969,613	\$ 271,635,628	13%
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	\$ 6,047,657	\$ 21,656,626	\$ 27,704,283	
Airports Authority Project Management and Wiehle Ave Garage	\$ 23,225,717	\$ 22,690,281	\$ 23,350,512	\$ 46,040,793	
Project Management Support	\$ 90,004,649	\$ 82,118,420	\$ 41,575,798	\$ 123,694,218	
Airports Authority Services Total	\$ 142,109,519	\$ 110,856,358	\$ 86,582,936	\$ 197,439,294	56%
Contingency⁵					
Contingency Total	\$ 297,762,579		\$ 83,533,637	\$ 83,533,637	
Finance Costs					
Finance Costs Total	\$ 509,984,571	\$ 47,799,694	\$ 462,184,877	\$ 509,984,571	9%
Total Federal (FFGA Scope)	\$ 3,142,471,634	\$ 1,380,412,603	\$ 1,762,059,031	\$ 3,142,471,634	44%

1 Reflects Paid costs through July 25, 2011

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 contingency

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

c. Project Funding Sources: July 2011

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 (amendment for FTA review)	VA-03-0113-04		\$ 19,799,000		0%	\$ 19,799,000
FFGA Construction Grant	VA-03-0113-05		\$ 96,000,000		0%	\$ 96,000,000
FFGA Balance	Planned		\$ 379,717,636	\$ -	0%	\$ 379,717,636
Subtotal - New Starts		28.64%	\$ 900,000,000	\$ 404,483,364	44.94%	\$ 495,516,636
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	\$ 8,562,331	40%	\$ 12,719,559
STP Balance	Planned		\$ 6,500,001	\$ -	0%	\$ 6,500,001
STP/Sec. 5307		2.39%	\$ 75,000,000	\$ 55,780,440	74%	\$ 19,219,560
Local Funds						
VTA 2000			\$ 51,700,000	\$ 51,700,000	100%	\$ -
Commonwealth Transportation Bonds ²			\$ 125,000,000	\$ 113,433,213	91%	\$ 11,566,787
Fairfax County Funds ³			\$ 523,750,000	\$ 192,984,405	37%	\$ 330,765,595
Dulles Toll Road Revenues ^{2,4}			\$1,467,021,634	\$ 562,031,182	38%	\$ 904,990,452
Subtotal - Local Funds		68.97%	\$2,167,471,634	\$ 920,148,799	42.45%	\$ 1,247,322,835
Total Project Budget		100%	\$3,142,471,634	\$ 1,380,412,603	43.93%	\$ 1,762,059,031
Interrelated Highway Activities						
			\$ 123,208,229	\$ 74,525,137	60.49%	\$ 48,683,092
DTR Revenues/Commonwealth Funds³			\$ 123,208,229	\$ 74,525,137	60.49%	\$ 48,683,092
		TOTAL	\$3,265,679,863	\$ 1,454,937,740	44.55%	\$ 1,810,742,123

1 Reflects costs through July 2011

2 In January 2010, \$23.6 million 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

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.

Through July 25, 2011, MWAA reports that it has utilized \$176,915,998 of the available authorized federal contingency of \$200,000,000 for Contingency Phases 1 through 5. The contingency utilization reflects expended and obligated costs. Phases 1 and 2 carry the Project through the completion of station design, which was supposed to be completed by the end of the third quarter of 2009. The completion of station designs is now anticipated during the fourth quarter of 2011. DGS has issued permits for all stations. MWAA estimates that Phase 3, Utility Relocation Program, will be fully completed in the third quarter of 2011. MWAA reports that it has already obligated \$37,312,946 for Phase 6 through 10. As of July 25, 2011, of the

\$297,762,579 total project contingency, the project has \$83,533,635 available. However, the cost of the Allowance Items not yet charged to the project is estimated to be as much as \$59 million over budget, and there are already nearly \$56 million in open Directive Letters. **Thus, the project will be officially over budget in a matter of months.**

MWAA included proposed new Top Ten Risks as identified from the draft Risk Assessment in the handouts for August 10 QPRM. Once FTA and the PMOC agree, the new Top Ten Risks would replace those previously reported. MWAA will complete the RCMP upon incorporation of PMOC review comments, if any. MWAA continues to monitor the risk status and reports this information on a monthly basis.

With regard to Schedule Contingency, MWAA and DTP agreed to a zero loss recovery schedule with a data date of December 25, 2010. This conditionally approved recovery schedule has 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. Schedule contingency is 501 calendar days, based upon the *July 25* schedule update *and after MWAA granted time extensions.*

The following are the Project’s current top 10 cost and schedule risks, along with their status.

Top 10 Project Risks

Risk No.	Risk Description	SCC Reference	Risk Category		Status (Change from Previous Month)
			Cost	Sched	
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. Twenty-two of thirty-five sub-contract packages have been awarded to date. The variance of the awarded cost versus allowance budget is \$45.95 million. A sharp increase is expected in the coming quarter.
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	Closed.
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.

Risk No.	Risk Description	SCC Reference	Risk Category		Status (Change from Previous Month)
			Cost	Sched	
D-29	WFCY maintenance annex – Design constraints and WMATA requirements may erode the cost reductions anticipated.	30	X		Unchanged. Bids were received on July 7, 2011 and are being reviewed.
C-34	Utility companies performing utility relocation are not performing in accordance with the durations incorporated in the project schedule.	40.02	X	X	Schedule risk closed. Cost risk remains. (Replaced risk C-14.) Utility contractors have completed all critical relocation work in October 2010. As of June 25, 2011, <i>five</i> UR change orders remain under review.
M-16	Cost risk for vehicle procurement – size and timing of base order and options could change the car manufacturer’s interest in project and proposal pricing; vehicles may not be available in time for revenue operations.	20.01 20.02	X	X	Cost risk closed. Schedule risk remains. Bids were received on June 19, 2009. The WMATA Board awarded the contract to Kawasaki on July 27, 2010. NTP was issued on August 16, 2010. However, the conditional acceptance of the 64 th car for the Project, as contained in the bid, is not scheduled until January 15, 2015, which does not support Project needs. In addition, the earthquake/tsunami may delay the procurement further. PMOC requested MWAA to include a schedule risk since the schedule does not currently meet the FFGA date.
M-12	Unpredictability of ROW settlement costs.	10.04	X		Unchanged. Use of condemnation has increased the ROW costs.
C-20	WMATA scope of work, including site access support, technical support and WMATA construction elements may exceed the budget and schedule. In addition, there is the risk that WMATA will have difficulty supporting the DB contractor’s requirements.	10.00 20.00 50.00	X	X	Unchanged. Technical support for design has been generally provided in a timely manner. SSWPs required to access WMATA property are lengthy. There is potential risk with WMATA directing systems design upgrades for ATC, Traction Power and Communications systems.

Risk No.	Risk Description	SCC Reference	Risk Category Cost Sched		Status (Change from Previous Month)
D-19	Cost of Dominion Virginia Power (DVP) 34.5 kV distribution – Level of design is not typical of 100% PE design.	50.04	X		Unchanged. Design of ductbank that will contain 34.5 kV power the length of project has been completed and the ductbank construction continues. Design by DVP to bring power to project has not been completed.
D-27	Permit Approvals – Potential delays due to the Virginia Department of Transportation (VDOT) requiring their review/approval of final design plans prior to Issued for Proposal (IFP) submittals. Potential delays due to the Department of General Services (DGS) making design-related comments rather than strictly permit/code comments.	10.00 20.00 40.00	X	X	Unchanged. The issuance of construction permits is taking longer than anticipated and the contractor is claiming that its costs are increasing. The Six Sigma process improved turn-around time with VDOT. The VDOT requirement for final design plans prior to IFP submittals may increase the 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	2B.01	Final Testing Plan for Re-used 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	Y	DTP and CTI Final Reports and MWAA's audit of the findings and pier designs were submitted to the FTA, PMOC and WMATA. The Airports Authority President and Chief Executive Officer sent a wrap-up letter to the FTA Administrator on April 8, 2011, stating that it had accepted the DTP Inspection and Test Program Final Report for Existing Pile Foundations. It also outlined follow-up testing to be performed with the anti-corrosion measures recommended by UTRS. DTP has agreed to complete the recommended post construction corrosion control measures in the third quarter of 2012. A plan and schedule for conducting these remaining tasks will be forwarded to the FTA upon receipt and approval by the Airports Authority. <i>The PMOC issued its final spot report on July 28, 2011.</i>	R

4	2A.03	Update Risk and Contingency Management Plan (RCMP) (October 2010)	The original Risk Management Plan was prepared in October 2008 and needs to be updated to reflect the current Project Status.	N	N	N	MWAA has engaged their Risk Management Consultant who has prepared a draft revised Risk Assessment (Analysis). The analysis was submitted to the FTA and PMOC on January 31, 2011. It is anticipated that once agreed upon, the Top Ten Risks as identified from the Risk Analysis will replace those previously reported MWAA submitted a draft "Risk Management Plan" on June 3, 2011. The PMOC provided comments to MWAA on July 5, 2011. MWAA edited the Plan and resubmitted it to the FTA on August 5, 2011. <i>MWAA and the PMOC met again on September 7, 2011 and discussed the relevancy of the "Proposed Top Ten Risks" and relevancy of the milestones listed on Table 3-1. Some changes were discussed that will be included in an informal e-mail submittal during the coming week for further review and comment.</i> Upon incorporation of PMOC review comments, if any, the RCMP will be completed by MWAA.	R
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KEY ITEM

Subtask 2A
Subtask 2B

CLIN 0002A – PMP Review
CLIN 0002 – On-Site Monitoring

LEGEND

PRIORITY (PR)

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

GRANTEE ACTION

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

PMO CONTRACTOR STATUS

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

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

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
CPM	Critical Path Method
CTI	CTI Consultants, Inc.
CY	Calendar Year
DB	Design-Build
DCC	Design Conformance Checklist
DCN	Design Change Notice
<i>DF</i>	<i>Direct Fixation</i>
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	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
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: *September 23, 2011* (reporting current through *August 2011*- Financials through *July 2011*)

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.

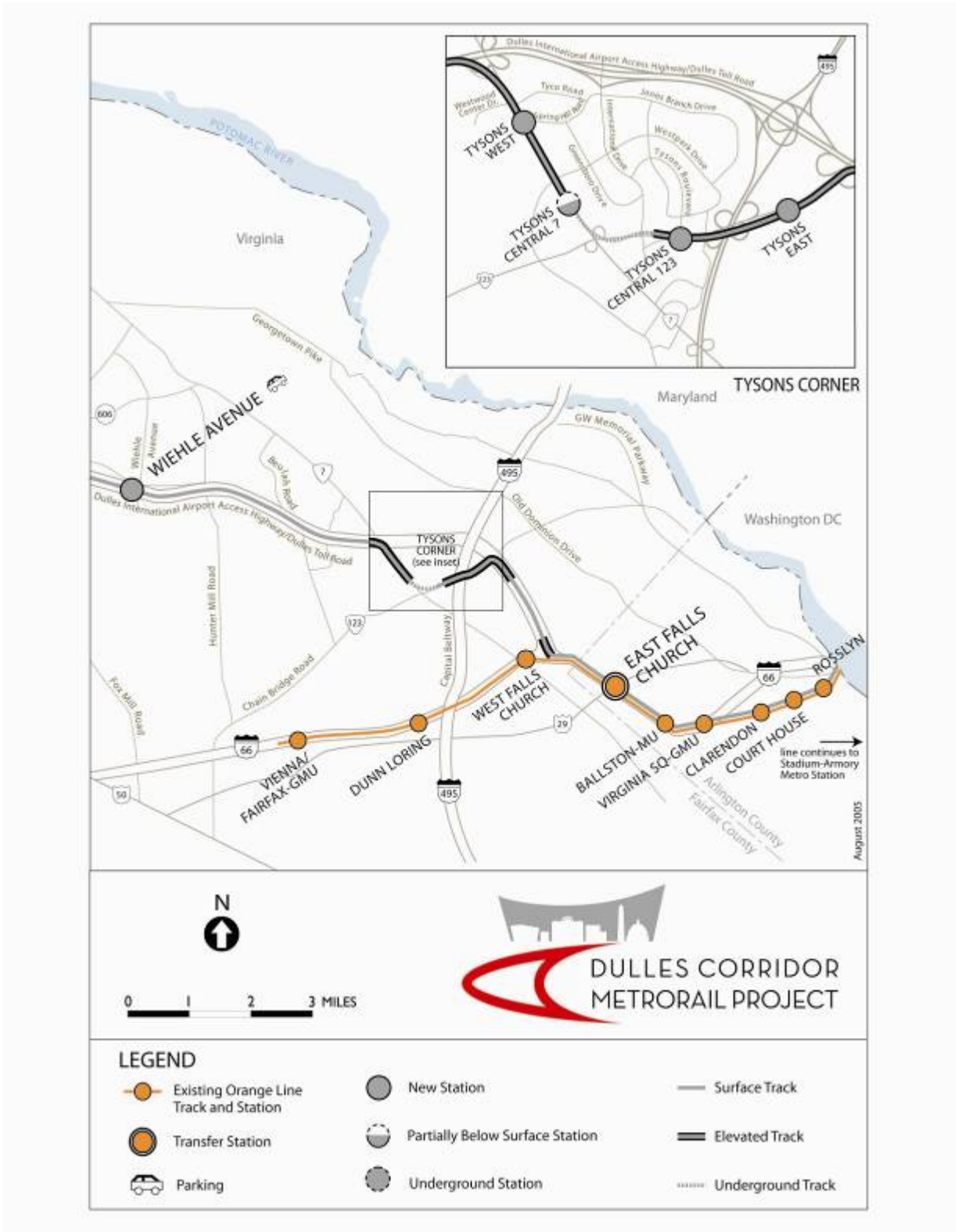
Schedule

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
06/19/14	Revenue Operations Date (ROD) <i>as of July 25, 2011</i>		
50.0%	Percent Complete Construction <i>as of August 31, 2011.</i>		
43.3%	Percent Complete Time based on ROD of December 1, 2014 (based on FFGA)		
58.00%	MWAA's Estimate of Project Earned Value through <i>July 2010</i>		

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
\$1.380 billion	Expenditures through <i>July 2010</i> from total project budget of \$3.142 billion
44.0%	Percent complete based on federal expenditures through <i>July 2011</i> .
\$83.533 million	Total project contingency remaining (allocated and unallocated) through <i>July 2011</i> .

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	<i>Version</i>	<i>Review By FTA</i>	Status
Safety and Security Management Plan	9/2009		Accepted
Safety and Security Certification Plan			Under development; 98% complete
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, 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 two representatives at the January 26, 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 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 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, 98% complete.
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	Y	
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 documented/implemented Contractor Safety Program with which it expects contractors to comply?	Y	
Does the grantee's contractor(s) have a documented company-wide safety and security program plan?	Y	DTP's Construction Safety, Health and Security Plan accepted on January 6, 2009.
Does the grantee's contractor(s) have a site-specific 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?		
Does the grantee conduct site audits of the contractor's performance versus required safety/security procedures?	Y	

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

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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