

COMPREHENSIVE MONTHLY REPORT

September 2011

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

October 19, 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 *October 4, 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 *October 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 *October 4, 2011* to conduct a monthly progress review meeting. The status information is as of *September 30, 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. *WMATA and Kawasaki continue their efforts to mitigate the six-month rail car delivery delay caused by the Japan earthquake and tsunami. However, MWAA has stated that WMATA will not have delivery of all 64 rail cars by the FFGA date. WMATA and Kawasaki met again to coordinate those efforts on October 13, 2011.*
- **Design progress** - Overall project design remains at 98% complete as of the end of *September 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.” The Battelle safety review is progressing with the review of proprietary data at Alstom’s facility in Rochester, NY in September. *Battelle expects to publish a draft report in early November 2011.* Battelle’s revised schedule shows December 14, 2011 for submission of the “Final Safety Assessment Report.”

- **Construction progress** is broken into two components: utility relocation (UR), which is 99% complete, and design-build (DB) construction, which is approximately 53% complete. Significant accomplishments for *September* 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; *completion of the IB NATM tunnel arch liner construction and the IB and OB safety walk construction along with contact grouting of the OB tunnel, only contact grouting of the IB tunnel remains;* Launch Girder Truss LG3 was damaged on July 25th during a back launching operation and disassembly was completed on September 9. *Ground based crane erection of the remaining sixteen segments for the I-495 crossing will commence on October 12.*

CONSTRUCTION PROGRESS THROUGH AUGUST 2011			
GUIDEWAYS AND TRACKWAYS	% COMPLETE	STATIONS	% COMPLETE
O-1 Guideway	97%	Tysons East	32%
Tysons East Guideway	93%	Tysons Central 123	31%
Tysons Tunnel	85%	Tysons Central 7	14%
Tysons West Guideway	63%	Tysons West	22%
O-3 Trackway	76%	Wiehle Avenue	33%
O-9 Trackway	85%		

- **The DTP Schedule Update** with a data date of *August 25, 2011* showed a *-194* day loss compared to the *-188* calendar day *loss* reflected in the *July 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 11 Facility.” These issues move the forecast SSCD to *February 19, 2014*, with a projected ROD of *June 25, 2014*. The DTP WFCY completion date, which is still disconnected from the mainline schedule, *gained +55* days yielding a projected completion date of *February 28, 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. *Difficult and protracted negotiations finally yielded a settlement of \$7.2M in mid-September 2011. This settlement also included the clearing of three uncertified claims submitted by DTP.*

The Project needs to increase its efforts to resolve differences relative to the *DCMP* mainline extension delays *claimed in 2011* 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 *October 4, 2011 monthly update meeting*, MWAA reiterated that their date for completing the WFCY work is October 30, 2013; DTP's date *currently remains as December 31, 2013*. At the *October 4th update meeting*, MWAA indicated that their position and DTP's remain the same. *However, MWAA reported that on-going executive level discussions between MWAA and WMATA in October 2011 regarding the building of the new S&I Shop may or may not yield an improved completion date. If the S&I Shop remains in the plans, then the WFCY completion date will actually slip several months due to the delay in awarding the contract.*

DTP's schedule with a data date of *August 25, 2011* 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 *fourth* 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 (RFC-160 & 161) requested by WMATA. *MWAA reported that they have begun negotiations with DTP and anticipate a settlement by the end of October 2011 with regard to RFC 160 and 161 that will recover all claimed losses with the exception of the nine non-compensable weather delay days that MWAA has already granted thus far.*

- **Budget** status as of *August 25, 2011* indicates that *\$1,704,368,060 (55%)* has been expended of the *\$3,142,471,634* budget total. MWAA reports *\$178,144,422 (89%)* of the available contingency for the first five contingency milestones have been utilized with a remaining contingency balance of *\$21,855,578 (11%)* available through the current phase of construction. **The federal portion of the Allowance Items recommended for award and yet to be awarded are estimated to be \$72.6 million over budget. Therefore, the project is likely to be officially over budget in a matter of months.** *MWAA does show \$71.9 million in potential contingency in budgeted Finance Charges that they could use to make up this deficit.* 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 *August 2011* is *60.1%*.

- **Risk --** The PMOC reviewed MWAA's updated Risk Assessment dated April 15, 2011. *The PMOC and MWAA have met several times since to review various revisions. The PMOC provided comments on October 2 and another comment resolution meeting was conducted*

with MWAA on October 4, 2011. MWAA expects to submit the final draft RCMP by October 31, 2011.

- The Full Time Equivalents (FTE) estimated total for *September* is 1,456, which is a *decrease* of 132 from the *August* actual of 1,597. MWAA reported that they expect a new workforce report from DTP in October that shows a ramp up of FTE's in the months to come. It is the PMOC's opinion that this is not an appropriate time in the Project schedule for such FTE's losses to occur. The new plan may remedy this concern. The pre-casting facility continues to produce pre-cast segments in advance of the schedule needs and is expected to complete its final precast segment in mid-October 2011.
- 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 therefore a betterment. The projected overruns in the estimated costs of the remaining Allowance Items (\$72.6M) indicate that there is an immediate need to replenish the project contingency. **Given the forecasted magnitude of the Allowance Items cost overrun, the Project is, in the PMOC's opinion, on track to exceed the FFGA amount.**

The continuing impasse between DTP and MWAA regarding the monthly schedule updates and their lack of agreement on the actual critical paths requires the top management of each group to focus on this matter and for DTP to cease its apparent claims posturing position. 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 continues to be a concern to the PMOC. The original 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. 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 reported in the October 4th monthly meeting with the FTA and PMOC that they have begun negotiations with DTP*

and anticipate a settlement by the end of October 2011 that will recover all claimed losses with the exception of the nine non-compensable weather delay days that MWAA has previously granted.

MWAA continues to monitor expenditures to date and to update the estimate at completion. Through *August 25, 2011*, MWAA has utilized \$178,144,422 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. *MWAA expects to submit the final draft of the RCMP by October 31, 2011.*

The Quality Assurance (QA)/Safety group maintains an active schedule of audits and surveillances and accident data. Through *September 2011*, of the cumulative total of 7,207,375 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 *October 2011*.

DTP submitted revisions to the System Safety/Security Management Plan (*SSMP*) and DTP Procedures PPQ 01.06.02, Development and Maintenance of the Safety/Security Certifiable Items List and PPQ 01.06.03, Design Conformance Certification that MWAA accepted on December 6, 2010. The FTA and PMOC met with MWAA, WMATA, and DTP on April 29, 2011 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. *MWAA published its draft SSMP Revision 9 on September 30, 2011. The draft provides a placeholder as Appendix E for WMATA’s input yet to be completed. A follow-up joint meeting will be scheduled in the fourth quarter of 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 has 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 August 2011, DTP has awarded \$310,943,871 of the \$437,278,511 Federal Allowance Items Budget to subcontractors and suppliers, which reflects no change since May 2011. A \$45,250,311 overrun exists for the 23 of 35 sub-contract packages awarded thus far for federally-funded allowance items. In addition, MWAA has Allowance Items recommended for Award, but not yet awarded, of \$229.0 million of which \$72.6million is over budget.

Utility relocation is 99% complete, and DB construction is approximately 53% complete. Remaining utility relocation involves installation of traction power ductbank and manholes for bridge crossings along the DIAAH from Route 7 to Route 267 and along the DCR between Route 123 and the WMATA K-Line.

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

- **Operations Areas OP-1, OP-2 and OP-3 (I-66/DCR/Laydown Area 1)** – Completed the construction of retaining walls at the K-Line. Completed installation of the No. 10 double crossover in the existing K-Line tracks during the Labor Day track outage. Continued installation of traction power and switch cables during non-revenue hours at the K-line. Continued installation of cable troughs adjacent to the IB N-line (Dulles Extension) track west of the new No. 15 turnout. Completed 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. Continued cable trough installations between Magarity Road and the Tysons East Guideway abutment. Continue cable trough installations on the O-1 aerial guideway. Continued track and plinth construction on the O-1 guideway. Continued excavation and SOE at stage 2A of the WFCY Cut and Cover tunnel in the middle lanes of the east-bound DCR. Continued grading work and installation of soil stabilization materials for the stream restoration at the WFCY. Continued the jack and bore work for storm drains, sanitary sewer, and traction power conduits into the WFCY. Completed assembly of TPSS #1 and communications room modules and began preparation for the initial field testing. Began mobilization for construction of the post and panel walls at TPSS #2. Delivered and set TBS #2 and Communications Room modular facilities and continued internal assembly work. Completed duct bank tie-in to the existing Fisher Avenue TPSS and continued installation of breakers and cables inside the TPSS. Completed posts and started installation of precast panel walls at TCR #1 and continued subgrade placement for the building slab.
- **Operations Area OP-4/5A (Tysons East Guideway/Station/I-495 Crossing)** – Continued segmental box girder guideway erection with Truss LG1 completing spans 38-

OB, and 38-IB, for a total of sixty-four spans completed to date. Completed disassembly and removal of Launching Girder Truss LG3 damaged in an accident on July 25. Continued trackwork installation of the No. 10 double crossover between piers 20 and 22. Continued miscellaneous direct fixation trackwork installation on the OB and IB trackway. Began installation of acoustical precast panels on segmental girders between piers 23 and 29. Continued placing concrete walls and slabs at the ground level entrance and service rooms at the Tysons East Station. Installed precast elevator shaft walls at the east end of the Tysons East Station.

- **Operations Area OP-5 (Tysons Central 123 Station)** – *Continued form and rebar installation and pouring outer mezzanine columns. Completed installing the track deck AASHTO girders on span 73 and continued their installation between spans 74 and 75. Continued installation of ductbank for traction power, ATC, and communications between Tysons 123 Station and the East Ventilation Structure.*
- **Operations Area OP-6 (Laydown Area #6/NATM Tunnel/East Cut & Cover and Ventilation Structure)** – *Continued forming, rebar installation and pouring walls for the East Ventilation Structure. Completed pouring safety walkway in IB tunnel. Completed pouring arch sections in the IB tunnel, with a total of fifty-seven arch sections. Completed contact grouting in the OB tunnel.*
- **Operations Area OP-6 (West Cut and Cover Tunnel)** – *Continued with the invert slab, wall and roof construction on the IB and OB tunnel sections. Continued with the wall construction and installation of conduits at the West Ventilation Structure.*
- **Operations Area OP-7 (Tysons Central 7 Station)** – *Continued pouring walls for TPSS #5. Continued forming and pouring platform slab. Continued form, rebar installation, and pouring mezzanine support columns.*
- **Operations Area OP-8 (Tysons West Station/Guideway)** – *Water main installation along WB Route 7 continues between Spring Hill Road and Westpark Drive. Completed the pile cap at pier 32, for a total of 54 completed to date. Continued segmental girder erection with Truss LG2, completing spans 8-IB and 8-OB, for a total of eight completed to date. Continued balanced cantilever segmental erection for spans 5, 6 and 7 with a ground based crane. Completed pier cap at pier 21-IB/OB, for a total of forty-seven completed to date. Continued erecting mezzanine steel framing at the Tysons West Station and excavation for the pedestrian bridge footing. Continued construction of straddle bent 42 over east-bound Route 7. Began erection of Station segmental girders with a ground-based crane, completing spans 24-OB, 25-OB, 26-OB, 27-OB, 28-OB and 29-OB, for a total of six completed to date.*
- **Operations Area OP-9 (DIAAH)** – *Completed waterproofing of the Difficult Run Bridge deck and continued pouring approach walls. Continued construction of retaining walls on both OB and IB between Hunter Mill Road and east of Trap Road to Route 7. Continued jack and bore ductbanks and vault installations for TPSSs #7 and #8. Completed jack and bore ductbanks for TPSS #11. Continued installation of grounding grid, ductbanks, and manholes at TPSS #10. Completed building the pad and prepared for delivery of the TPSS #9 modular units. Continued installation of cable troughs*

between Hunter Mill Road and Difficult Run. Began clearing and excavation at Storm Water Pond No. 11.

- **Operations Area OP-10 (Wiehle Avenue Station/Laydown Area 13)** – Continue MEP rough-ins at the west platform service rooms. Continued construction of the precast service rooms at the west end of the station. Completed the fireproofing of structural steel. Continued installation of precast beam covers. Delivered station escalators and prepared for their installation.
- **Laydown Area 10 (Pre-cast Yard)** - Continued casting of segmental box girders; completed 2,747 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 *September 2011*, 83 of the 102 parcels required for the Project have been acquired. The table below summarizes acquisition activities for the Project through *September 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	0	0	51	49	(2)
DIAAH	27	0	1	1	27	14	(13)
TOTAL	102	0	1	1	102	83	(19)

- 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 *September 2011*, discussions began for two recently filed cases (Parcel 76, Oakcrest School, and Parcel 109, Plaza America.). One case moved towards an Agreement After Certificate (Parcel 76, Oakcrest School) and three cases continued to move toward having the Final Order entered for Agreements After Certificate (Parcel 35, Embassy Suites and Parcel 36, Container Store/CG Tysons Corner, LLC and Parcel 29, Stohlman).

In September, another case (Parcel 69, Wolftrap Foundation) was scheduled for trial in March 2012. This case is in addition to Parcel 56, HBL Mercedes/George C. Andreas Tr, et al, currently scheduled for trial on December 13, 2011 for which a settlement has been approved by VDOT.

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 *September 2011* includes the following:

- **Dulles Connector Road (DCR) East – (K-Line to Route 123)** – *Continue installation of ductbanks and manholes for bridge crossings at Pimmit Run and Magarity Road. Continued installation of traction power ductbank adjacent to the WFCY cut and cover tunnel.*
- **Route 123 (DCR to Route 7) - Lane** *completed the last section of DVP ductbank adjacent to the Tysons East Station.*
- **Route 7 (Spring Hill Road to Tyco/Westwood)** – *AboveNet completed splicing and cutover work on the north side of Route 7.*
- **Route 7 (Tyco/Westwood to Route 267/Toll Road)** – *AboveNet completed splicing and cutover work on the north side of Route 7 at Koon’s Toyota.*
- **DIAAH West -- (Route 7 to Wiehle Avenue)** – *Continued installation of the traction power ductbank and manholes for bridge crossings. Washington Gas was concerned that TPSS #10, as designed, would be too close to their 4” steel line. They have decided to replace and relocate the line with a PVC line further from the structure and design for this relocation continues.*

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	Development continues
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. *WMATA attended a Monthly Progress Meeting in Japan on September 8, 2011.*

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 *proceeded* 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--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 *previously* prohibited, WMATA *has been* doing the PDRs at WMATA's headquarters. *All PDRs except for Trucks have been completed.* 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 WMATA 7K management team visited Kawasaki and some of its key sub-contractors (Toshiba, Fuji, and TOA) in Japan on September 10-17 and held the September Monthly Progress Review Meeting. At Kawasaki, they reviewed the hard (full scale) mock-up carshell and truck mock-up assembly. At Toshiba, they reviewed the equipment mock-ups for network, propulsion and the Train/Wayside Data Transfer; at Fuji, the Auxiliary Power System/Low Voltage Power System and Doors; and at the TOA Corporation, the Communication and Monitoring Systems. Among the topics discussed at each of these facilities were how to mitigate the schedule delay and what additional efforts are being considered to close the potential 4-6 months delay that is being projected. Kawasaki and the subcontractors maintained their pledge to continue to expedite as much as possible (adding resources, pre-order of some components etc.) but still are not willing to commit to an earlier (delayed) delivery date. WMATA continues to insist to Kawasaki that this is not acceptable. In addition, WMATA reviewed transfer of technology plans (Buy America) and obtained confirmation that these efforts are on target.

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

g. Safety and Quality Status

MWAA participated in *three* safety walk downs with DTP during the month of *September*. All were related to Design-Build work. As of *September 30, 2011*, DTP had logged 7.207 million project man-hours with 297 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 489 incident investigation reports, 81 utility hits and 15 vehicular accidents. MWAA *reported that first aid case rates appear to have stabilized. However, MWAA continues to question DTP's decision not to replace the Safety Manager that died. The issue has not yet been resolved.*

DTP submitted Revision 5 of the SCIL to 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-October 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, "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...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."

MWAA convened a "SCIL Issues Meeting" with DTP on September 21, 2011 to elevate its concerns over the lack of SCIL sign-off progress. DTP Executive Management was not in attendance, nor was the construction department represented and WMATA was not invited. However, DTP's lead engineer attended and now seems to be taking the lead with the design portion which may produce better results in the weeks to come. DTP reported that it was struggling to get the systems IFC drawings completed, but committed to submit an improved Design Conformance Check (DCC) List No. 7 that would bring the total design sign-offs to 65% to 70% complete by October 3, 2011.

On October 3, 2011, a pre-submittal over-the-shoulder review of DCC No. 7 was conducted which yielded more refinements. Subsequent to this meeting, DTP replied to MWAA's August 31, 2011 letter and lowered its anticipated DCC No. 7 sign-off rate to 60%. This DTP Letter No. 01575 defended its SCIL process and concluded by saying "While these issues cause logistical problems, they will neither degrade the System Safety value of the SCIL process, nor impact overall project schedule. DTP and MWAA have been working together to resolve these issues in a manner which provides the type of Safety/Security information the Project needs to complete the SCIL to the satisfaction of MWAA, WMATA, and the FTA." DTP submitted DCC No. 7 on October 12, 2011 which brought the total DCC sign-offs to 49%. DTP reported that the Communications sign-offs did not arrive as anticipated and therefore there sign-off quantities were not as expected. DTP also reported that they expect to complete all DCC sign-offs by the 1st quarter of 2012.

It is the PMOC's opinion that not much has changed since MWAA convened a special "MWAA/DTP SCIL Progress Concerns Meeting" on May 25, 2010. At that meeting, DTP Management stated that DTP didn't disagree with any of the concerns conveyed and directed his team to work out the details to MWAA's satisfaction. At that meeting there was an agreement that the design sign-offs would be predicated upon issuance of the IFC Drawings. That was a positive development; the negative development is that not much has been successfully signed-off. It appears to the PMOC that the two DTP people (one full time and

one part time) who have been tasked with managing the SCIL and sign-offs are not up to the task. In addition, they have insufficient authority to effectively implement the sign-off process with the DTP design and construction departments.

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 *conducts a sample review* of the submitted DCC and CCC items *and coordinates its comments with MWAA.*

Regular weekly visits to work sites by safety representatives from DTP, MWAA and WMATA continue. The Tri-State Oversight (TOC) and the FTA's on-site PMOC representative continue to meet monthly with the Safety/Security Certification Working Group (SCWG) and continue ongoing involvement in the certification process. The SCWG held its regular monthly meeting on *September 20, 2011.*

MWAA transmitted Revision 5 of the DTP System Safety/Security Certification Management Plan to the FTA on December 8, 2010. MWAA submitted its Safety and Security Management Plan, Revision 8, to the FTA on February 17, 2011. An FTA/PMOC Safety/Security Program Review Meeting was conducted with all stakeholders on April 29, 2011. FTA explained the requirement for a complete SSMP for the Dulles Corridor project -- 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 *within the fourth quarter of 2011* to present the approach they developed and to clarify what documentation FTA will need. The April 29th meeting was productive, and in the PMOC's opinion, both MWAA and WMATA appreciated 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. *MWAA submitted Draft SSMP Rev. 9 to the FTA, PMOC, WMATA and TOC on September 30, 2011. This draft still requires WMATA's input. WMATA expects to have its portion ready for incorporation into the Draft SSMP in late October 2011.*

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

- *Truland Walker-Seal: A surveillance was conducted on September 13, 2011. There were no issues and a report was issued on October 7, 2011.*
- *DTP Environmental: An audit was conducted on September 14, 2011. There was one observation and a response is due on October 10, 2011.*

- *UTRS: An audit was conducted by DTP on September 15, 2011. There was one observation and a report will be issued in mid October 2011.*
- *Lane Construction (Early MEP): An audit was conducted by DTP on September 21, 2011. There were three observations and a report will be issued in mid October 2011.*
- *DTP Subcontractor/Supplier Submittal Process: DTP/Subcontractor Nonconformance Control Systems: A surveillance was conducted on September 28, 2011. There was one observation and a report will be issued in mid October.*
- *Verify Corrective Actions related to CAR No. DTP-18-11: The surveillance was conducted on September 30, 2011. There were no issues and the surveillance is closed.*

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>
10/05-06/11	A	MWAA QA Program (Internal)	N	MWAA
TBD	A	DTP Engineering Difficult Run Bridge Design Calculations	N	MWAA
10/19-20/11	A	Turner Construction (Shell Enclosure Trades)	Y	DTP
TBD	A	DTP Engineering	N	MWAA
10/26-27/11	A	CTI Consultants (Special Inspection Program)	N	MWAA
11/9-10/11	A	Kone (Elevators and Escalators)	Y	DTP
11/16-17/11	A	DTP QA, Document Control, Training	N	MWAA
12/5-6/11	A	Delta Railroad (Trackwork)	Y	DTP
12/12/11	S	DTP Subcontractor/Supplier Submittal Process: DTP/Subcontractor Nonconformance Control Systems	N	MWAA

3. Project Management Plan and Sub-plans

MWAA submitted its draft PMP update of Version 7.0 on September 3, 2010. This PMOC reviewed the plan and made six recommendations 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. *No new procedure updates were made during the period from July through September 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 *were* included in an informal e-mail submittal during the second week in September for further review and comment. The PMOC *met* 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. *The PMOC met with WMATA to discuss the development of the RFMP and the PMOC's comments on September 29, 2011. WMATA anticipates submitting the final draft of the RFMP at the end of October.*

- 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 *within the fourth quarter of 2011* to present the approach they developed and also to clarify what documentation FTA will need. *MWAA published Draft SSMP Revision 9 on September 30, 2011 for review by all partners. WMATA is currently developing its input to the draft.*

4. Project Schedule

The most recent MWAA analyzed project schedule update has a data date of *August 25, 2011*. The primary critical path identified by DTP showed a *-194* day loss as compared to the *-188* calendar loss reflected in the *July 25, 2011*. DTP states that these losses are attributable *to a combination of delays caused by the discovery of Comcast utilities underneath the TPSS #11 facility, MWAA's extended review of DTP's submittal of precast Post and Panel walls for the TPSS #11 facility and the Remote Monitoring and Control change directed by MWAA as instructed by WMATA*. These issues move the forecast SSCD to February 19, 2014, with a projected ROD of June 25, 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.

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 completed *dismantling* the gantry *in* early September. The remaining sixteen segments will be placed by a ground-based crane *beginning October 19, 2011*. Any schedule impacts are not yet known.

In the *August 2011 Schedule Update*, DTP submitted notice of *an additional two weather days bringing the claimed total to 32 weather days to date*. Eleven of these were contractually anticipated and accounted for in DTP's work plan. DTP later retracted their position for three days. MWAA assessed *nine* of the remaining 18 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 *nine claimed weather 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 *gained +55 days*, with a completion of the full facility shown to be *February 14, 2014* according to the *August 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 *stating in its September 30, 2011 review letter that "The Airports Authority still does not agree with DTP's schedule for the rest of the scope of work, noting that the one year duration allocated by DTP following construction of the buildings and sound box completion is more than what is needed."* *The one year is an apparent over stated duration for commissioning.*

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 advance the WFCY upgrade and the DCMP tie-in design-build effort on a "time and material" basis in accordance with MWAA-issued directive letters. The PMOC agrees that the WFCY could be completed 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 support 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.

Currently, all partners continue to cooperate and support the yard upgrade work and the related tie-in and integration process of the WFCY upgrade 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 3, 2011 *and a permit was issued on September 15, 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 continue discussing mitigation options to the budget and schedule overruns *that include the elimination of the S& I facility*. *There are on-going discussions between the MWAA and WMATA CEO's to reduce the cost and construction durations*.

It remains the PMOC's opinion that MWAA is vigorously pursuing control over the Project master schedule, but with limited cooperation from DTP. MWAA *previously reported* progress with the WFCY schedule disagreements in that they *were* nearing a cost settlement with DTP that *yielded* a WFCY completion date that supports the Project ORD. *However, those efforts are on hold until MWAA and WMATA decide whether the S&I Shop will be built*.

The DCMP mainline schedule continues to be problematic. MWAA *analyzed* DTP's August 25, 2011 schedule reflecting a -194 calendar day variance to the plan *and has again detailed its disagreement in a letter dated September 27, 2011*. 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 *associated with RFC's 160 and 161 and is a blatant misuse of the schedule intended to track real time progress and accurate completion projection*. DTP submitted *these RFC's, proposed at a cost of \$36.9 million*, to MWAA on September 6, 2011. *They represent the primary driver to the delays and claimed increased costs associated with the TPSS and ETS Remote Monitoring System Changes requested by WMATA*. *Negotiations have begun and MWAA's goal is to reach a settlement within the month that will bring the SSCD back to August 9, 2013*. It appears to the PMOC that these losses portrayed in the schedule updates are recoverable. DTP and MWAA *agreed to a \$7.2 million settlement in September* for the acceleration to buy back the -113 days that accrued as of December 2010. *However, if a mitigation agreement for the -194 days subsequently accrued as claimed by DTP stalls, the contract completion date could be 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 commissioning.
- *Obtaining required weekend outages from WMATA for the K-Line Tie-in work.*
- 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 for track installation.
- DTP's non-performance in heavy civil construction, such as 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 DTP's August 2011 Schedule Update, the Critical Path, Comcast Lines Utility Relocation Conflict at the TPSS #11 location, has a -194 calendar day float achieving SSCD on February 19, 2014. It originates with the discovery on August 25, 2011, by DTP's subcontractor, Flippo, of Comcast communication cables conflicting with the drilled shaft locations for the Post and Panel walls for TPSS #11. The shafts have to be installed before installation of the Post and Panel walls can begin. Installation of the posts needs to be completed before the installation of ductbanks and base slab for TPSS #11. This delays the field installation of the TPSS #11 system followed by TPSS #10 installation. This is followed by sequential installation of Communications Room and Equipment starting at the TPSS #10 and continuing through the TPSS #7 location. Fiber Optic cables are installed after the Communication Room fit-out is complete which leads to Supervisory Control and Data Acquisition (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 for the following reasons:*

- *DTP has added approximately 102 calendar days to this path, without prior notification to the Project team, claiming additional time is needed for the Communications Room's equipment field installation and for the follow-on SCADA tests, as a result of the Remote Monitoring and Control change requested by the Project team.*
- *The status of the Comcast Lines is currently unknown. MWAA is working with DTP and Comcast to evaluate whether the lines conflicting with the drilled shaft locations are live or not. It is MWAA's understanding that all of the live utilities at this location had already been relocated. Relocation of the Comcast lines would only be needed if the lines were found to be active. (Subsequently, it was determined that MWAA knew where the original Comcast line was located and provided a relocation point for Comcast. For*

an unknown reason, Comcast incorrectly relocated the line. It was relocated during the second week of October and is no longer holding up DTP.)

- *Sequencing the systems and wayside installation work finish-to-start based on crew deployment when the activities can be performed concurrently, despite the activities negatively impacting the Project's critical path.*

In addition, MWAA continues to take exception to DTP's schedule for the WFCY. As submitted, it now reflects a completion date of *February 28, 2014*. DTP, per their schedule narrative, claim that the 55 day improvement in achieving the WFCY completion, relative to last month's update, is the result of DTP's refining of logic and durations within the testing and commissioning activities of the WFCY. MWAA, 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, MWAA 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. *MWAA is awaiting DTP's finalization and incorporation of these revisions into the Project schedule.* A schedule developed by MWAA indicates that completion of the WFCY is feasible by the end of October 2013. Also, a large portion of the WFCY 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 WFCY 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	July 2011	August 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	08/24/11	09/01/11
Utility Relocation Complete	03/05/10 ¹	09/13/11 ¹	12/07/11	01/13/12
Aerial/Station Foundations Complete	3/4/11	09/01/11	07/23/11 ^A	07/23/11 ^A
NATM Tunnels Mined	01/29/11	12/03/10 ^A	12/03/10 ^A	12/03/10 ^A
K-Line Tie-In	12/23/11	03/28/12	06/11/12	08/22/12
Guideway Complete	2/12/12	09/13/12	08/27/12	09/06/12
Train Control Complete	10/26/12	10/29/12	12/18/12	12/27/12
Substantial Completion	07/31/13	07/31/13	02/13/14	02/19/14
Revenue Operations - Target	11/27/13	01/20/14	06/19/14	06/25/14
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.
- Determine impact of Comcast lines at TPSS #11
- 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 *August 25, 2011* is as follows. Overall, approximately 46% 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	\$ 398,005,584	\$ 648,127,849
20	Stations	\$ 317,023,979	\$ 297,640,730	\$ 88,261,012	\$ 297,640,730
30	West Falls Church Yard	\$ 51,789,539	\$ 49,928,014	\$ 4,395,835	\$ 49,856,383
40	Site Work & Utility Relocation	\$ 232,936,987	\$ 234,887,505	\$ 181,979,698	\$ 260,639,458
50	Systems	\$ 278,157,645	\$ 297,984,463	\$ 70,139,507	\$ 295,245,932
60	Right of Way Acquisition	\$ 45,953,303	\$ 67,631,026	\$ 54,124,559	\$ 66,295,154
70	Vehicles	\$ 211,629,775	\$ 211,629,775	\$ 20,825,600	\$ 210,926,012
80	Professional Service	\$ 698,471,472	\$ 716,595,828	\$ 572,572,085	\$ 771,291,415
90	Contingency Mgmt. Reserve	\$ 130,000,075	\$ 108,061,873	\$ -	\$ 32,464,130
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	\$ 1,438,103,575	\$ 3,142,471,634

1) Current budget equals FFGA amount plus approved Change Orders CO-001-081, 083-089, Directive Letters 001-031, 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 \$32,464,130 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, August 2011

DESCRIPTION	FPGA AMOUNT (Original)	EXPENDITURE TO DATE ¹	ESTIMATE TO COMPLETE	ESTIMATE AT COMPLETION	PERCENT OF EAC EXPENDED TO DATE ⁶
FEDERAL (FPGA SCOPE)					
Design-Build					
Firm Fixed Price	\$ 1,112,052,172	\$ 901,543,730	\$ 611,143,882	\$ 1,512,687,612	
Firm Fixed Price Insurance and Bonds	\$ 65,109,408	\$ 66,679,611	\$ 2,601,210	\$ 69,280,821	
Firm Fixed Price Subtotal	\$ 1,177,161,580	\$ 968,223,341	\$ 613,745,092	\$ 1,581,968,433	
Subcontract Allowance	\$ 430,199,817	\$ -	\$ 148,475,931	\$ 148,475,931	
Design-Build Contract Prices	\$ 1,607,361,397	\$ 968,223,341	\$ 762,221,023	\$ 1,730,444,364	
Indexed Commodity Escalation	\$ 77,469,926	\$ -	\$ 51,503,353	\$ 51,503,353	
Design-Build Contract Total	\$ 1,684,831,324	\$ 968,223,341	\$ 813,724,376	\$ 1,781,947,717	54%
Utility Relocation					
Utility Work	\$ 84,312,807	\$ 96,041,434	\$ 10,613,201	\$ 106,654,635	
Terf Tax		\$ -	\$ 0	\$ 0	
Project Management and Final Design	\$ 8,423,426	\$ 18,490,485	\$ 851,785	\$ 19,342,271	
Utility Relocation Total	\$ 92,736,233	\$ 114,531,920	\$ 11,464,987	\$ 125,996,906	91%
Right of Way					
Right Of Way Total	\$ 42,443,132	\$ 54,399,075	\$ 12,521,079	\$ 66,920,154	81%
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	\$ 6,757,391	\$ 26,458,043	\$ 33,215,434	
Airports Authority Project Management and Wiehle Ave Garage	\$ 23,225,717	\$ 23,135,463	\$ 22,905,330	\$ 46,040,793	
Project Management Support	\$ 90,004,649	\$ 85,859,677	\$ 37,834,541	\$ 123,694,218	
Airports Authority Services Total	\$ 142,109,519	\$ 115,752,531	\$ 87,197,915	\$ 202,950,445	57%
Contingency⁵					
Contingency Total	\$ 297,762,579		\$ 82,305,213	\$ 82,305,213	
Finance Costs					
Finance Costs Total	\$ 509,984,571	\$ 47,799,694	\$ 462,184,877	\$ 509,984,571	
Total Federal (FPGA Scope)	\$ 3,142,471,634	\$ 1,438,103,575	\$ 1,704,368,060	\$ 3,142,471,635	55%

1 Reflects Paid costs through August 31, 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

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

6 Percent complete excludes contingency and finance charges

c. Project Funding Sources: August 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	Pending		\$ 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
Construction Grant	Pending		\$ 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	\$ 216,968,643	41%	\$ 306,781,357
Dulles Toll Road Revenues ^{2,4}			\$ 1,467,021,634	\$ 595,737,915	41%	\$ 871,283,719
Subtotal - Local Funds		68.97%	\$ 2,167,471,634	\$ 977,839,771	45.11%	\$ 1,189,631,863
Total Project Budget		100%	\$ 3,142,471,634	\$ 1,438,103,575	45.76%	\$ 1,704,368,059
Interrelated Highway Activities			\$ 123,208,229	\$ 75,678,672	61.42%	\$ 47,529,557
DTR Revenues/Commonwealth Funds³			\$ 123,208,229	\$ 75,678,672	61.42%	\$ 47,529,557
TOTAL			\$ 3,265,679,863	\$ 1,513,782,247	46.35%	\$ 1,751,897,616

¹ Reflects costs through August 31, 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 (\$400 million) 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 August 25, 2011, MWAA reports that it has utilized \$178,144,422 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 *August 25, 2011*, of the \$297,762,579 total project contingency, the project *has a total of \$82,305,211 available*. MWAA further reports that \$178,144,422 (89%) of the available contingency for the first five contingency milestones *has been utilized leaving a contingency balance of \$21,855,578 (11%) available through the current phase of construction*. However, MWAA estimates that the cost of the Allowance Items recommended for award, but not yet charged to the project is estimated to be \$72.6 million over budget. **Thus, the project may 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 continues to monitor the risk status and reports this information on a monthly basis. *The PMOC provided comments relative to the RCMP Rev 2b and MWAA’s subsequent submittal of September 16th on October 2, 2011 and a comment resolution meeting was conducted with MWAA on October 4, 2011. The revised Top Ten Risks and revised Contingency Management Procedure (PM-5.07) are to be submitted by MWAA on October 24th. MWAA expects to submit the final draft RCMP by October 31, 2011.*

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 *August 25* schedule update and after MWAA granted time extensions.

The following are the Project’s current top 10 cost and schedule risks *from the RMP dated October 2008*, 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 \$45.25 million. A sharp increase is expected in the coming quarter of approximately another \$72.6 million.

Risk No.	Risk Description	SCC Reference	Risk Category		Status (Change from Previous Month)
			Cost	Sched	
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.
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 <i>September 25, 2011</i> , five 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.

Risk No.	Risk Description	SCC Reference	Risk Category		Status (Change from Previous Month)
			Cost	Sched	
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.
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
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. 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 and <i>subsequently</i> e-mail the <i>following</i> week for further review and comment. <i>A joint meeting was again conducted to address the adjustments on October 4, 2011.</i> Upon incorporation of PMOC review comments, the RCMP will be completed by MWAA <i>by the end of October 2011.</i>	R

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: October 19, 2011 (reporting current through *September 2011*- Financials through *August 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.

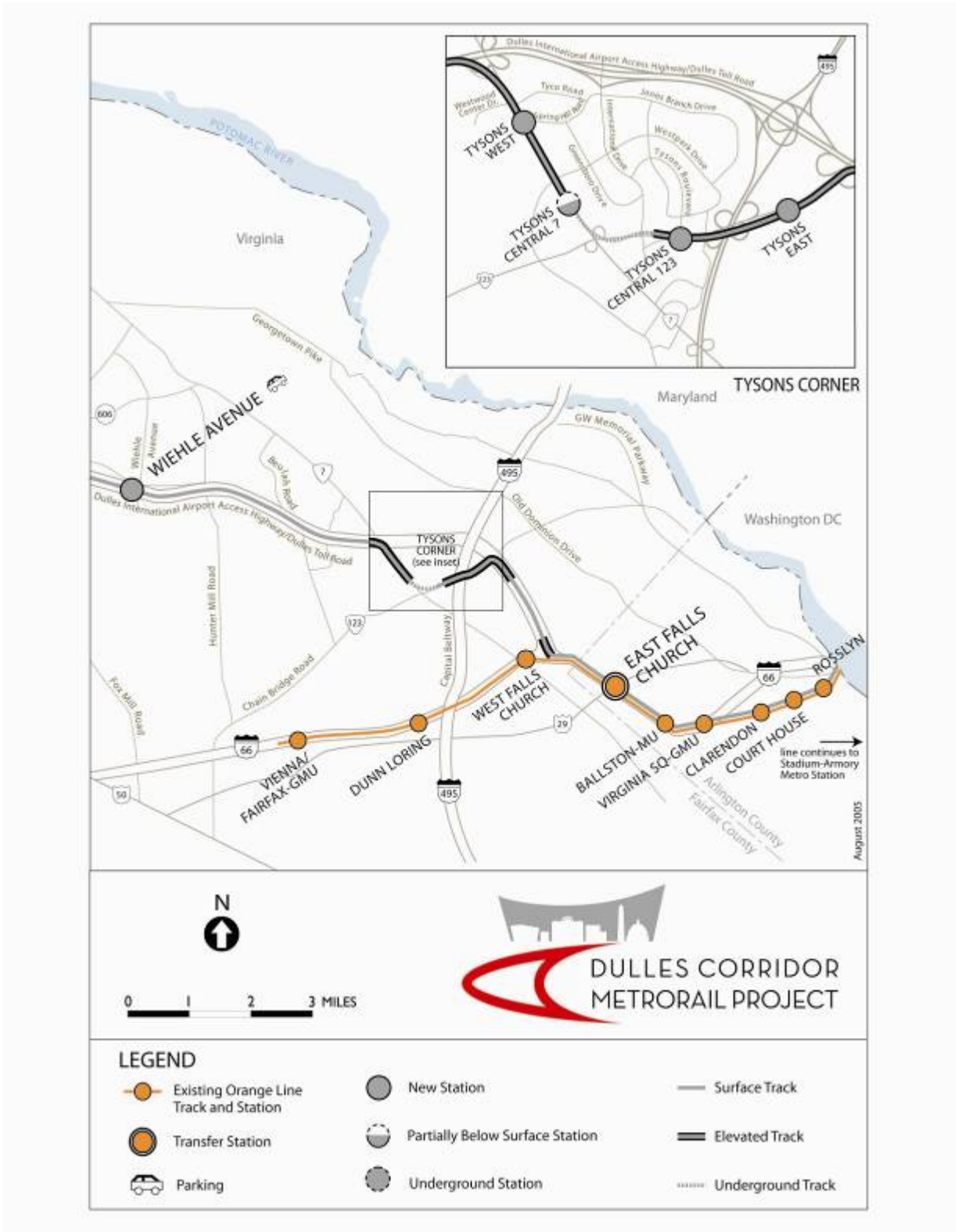
Schedule

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
06/25/14	Revenue Operations Date (ROD) <i>as of August 25, 2011</i>		
53.0%	Percent Complete Construction <i>as of August 31, 2011.</i>		
44.7%	Percent Complete Time based on ROD of December 1, 2014 (based on FFGA)		
60.1%	MWAA's Estimate of Project Earned Value through <i>August 2010</i>		

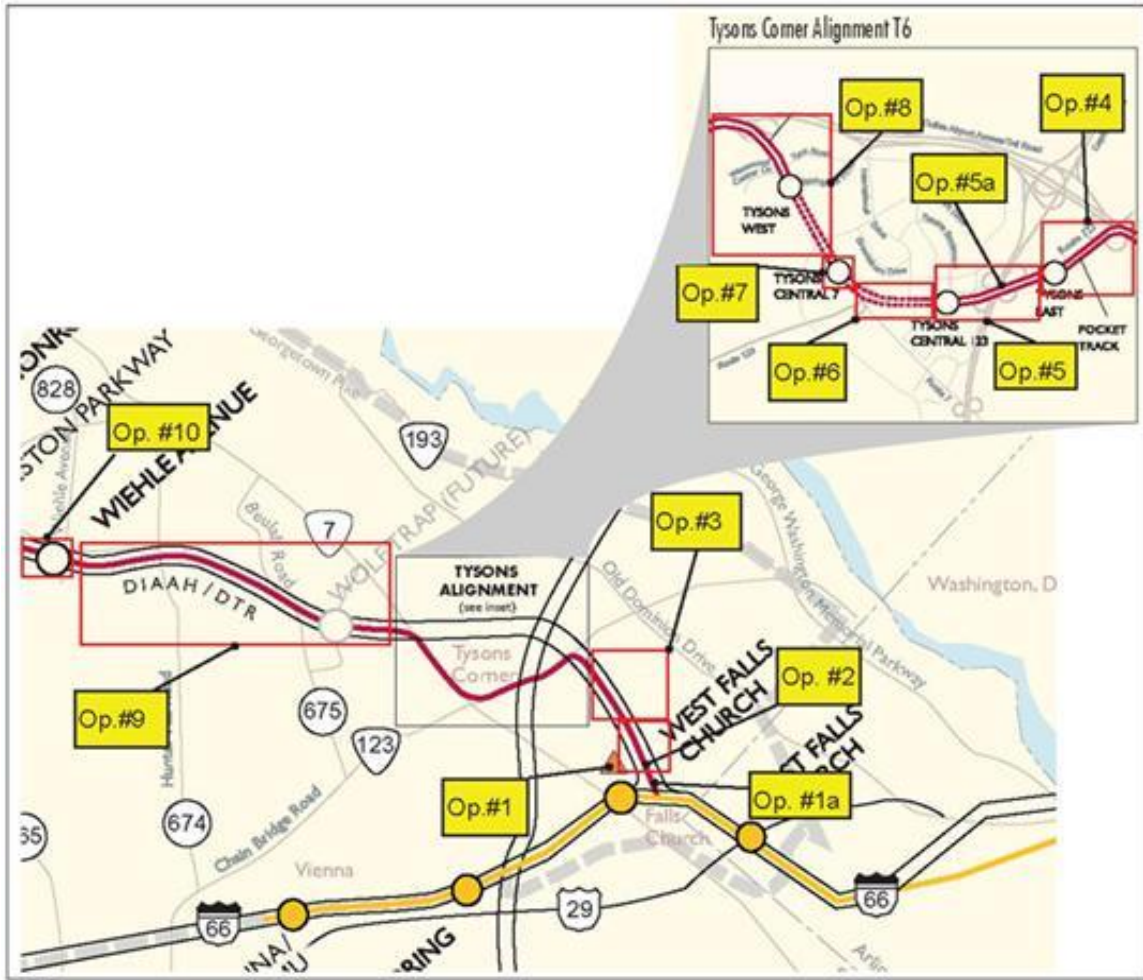
Cost

\$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
\$1.438 billion	Expenditures through <i>August 2010</i> from total project budget of \$3.142 billion
45.7%	Percent complete based on federal expenditures through <i>August 2011</i> .
\$82.305 million	Total project contingency remaining (allocated and unallocated) through <i>August 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

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