

COMPREHENSIVE MONTHLY REPORT

February 2012

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

March 26, 2012

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: 11.5 years

Length of Time PMOC Lead Assigned to Project: 4.0 years

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EXECUTIVE SUMMARY

The Project Management Oversight Contractor (PMOC) met with Metropolitan Washington Airports Authority (MWAA) on *March 7, 2012* to conduct a monthly progress review 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 March 2012*. 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 Service Date (RSD) is December 1, 2014. The Federal New Starts share is \$900 million, along with \$75 million in Surface Transportation Program (STP) funds, for the Initial Operating Segment (extension to Wiehle Avenue). Through Federal fiscal year (FY) 2011, Congress has appropriated \$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 *March 7, 2012* to conduct a monthly progress review meeting. The status information is as of *February 29, 2012*, unless otherwise noted.

- **Real estate acquisition** continues to keep ahead of construction requirements, often resorting to rights-of-entry (ROE) to gain access to required parcels.
- **Rail car Procurement** - *The 7K Monthly Progress Review Meeting No. 17 was held on February 9. The current Preliminary Design Review (PDR) phase completion date is March 16, 2012 compared to the baseline completion date of March 30, 2011. All PDR CDRLs have been submitted and 89% have been approved. The current Final Design Review (FDR) completion date is May 18, 2012 compared to the baseline completion date of October 24, 2011.*

On October 20, 2011, WMATA approved Kawasaki's Master Program Schedule (Baseline). WMATA subsequently approved Kawasaki's Mitigation Schedule on December 21, 2011 with a June 12, 2015 delivery date for the 64th railcar, which is more than six months beyond the FFGA completion date for the DCMP. MWAA informed the Regional Administrator for

Region III by letter on January 31, 2012 of the delay due to the March 2011 tsunami/earthquake.

- **Design progress** - Overall project design remains at 99% complete as of the end of *February* 2012. Revised designs for the Tysons Central 123 and Tysons West Station pedestrian bridges and pavilions are near their final permitting stages, which are expected to be complete in *March* 2012.
- MWAA issued a NTP on January 24, 2011 to an independent third party consultant, Battelle, to review Alstom’s safety analysis of the Generation 4 track circuit modules proposed for use on the Dulles Extension. The Battelle “Safety Analysis Review and Assessment” remains behind schedule, with the review of proprietary data at Alstom’s facility in Rochester, NY. During Battelle’s November interviews with Alstom, it was discovered that there were another ten documents Battelle felt needed to be reviewed before completing their draft report. MWAA reported during the *March 7, 2012* monthly meeting *that those final documents were provided to Battelle last week and they are currently under review. MWAA also reported that Alstom senior management has committed to an expedited review of Battelle’s findings so that a draft report can be submitted to MWAA in May 2012 for review.* Following this final review, MWAA will meet with Battelle and discuss a revised schedule for the “Final Assessment Report” submission to the FTA.
- **Construction progress** is broken into two components: utility relocation (UR), which is 99% complete, and design-build (DB) construction, which is approximately 67% complete. Significant accomplishments for *February* included continued segmental box girder installation *on the Tyson East Guideway* with Launch Girder Truss LG1; significant segmental box girder installation on the Tysons West Guideway with Launch Girder Truss LG2; major foundation, wall, track bed, platform, column and mezzanine work on all five stations; precast cladding installation *at Tysons East and Wiehle Avenue Stations* and architectural steel dome erection at the Wiehle Avenue Station; both ballasted and direct fixation trackwork installation on the O-1 Guideway, Tysons East Guideway, and along the DCR and DIAAH; and significant progress with the construction of Traction Power Substations, Communications and Automatic Train Control Equipment Rooms and associated factory fabrication and delivery of equipment to the Project.

CONSTRUCTION PROGRESS THROUGH FEBRUARY 2012			
GUIDEWAYS AND TRACKWAYS	% COMPLETE	STATIONS	% COMPLETE
O-1 Guideway	99%	Tysons East	46%
Tysons East Guideway	98%	Tysons Central 123	42%
Tysons Tunnel	99%	Tysons Central 7	26%
Tysons West Guideway	84%	Tysons West	30%
O-3 Trackway	92%	Wiehle Avenue	50%
O-9 Trackway	93%		

- **The DTP Schedule Update** with a data date of *January 25, 2012* “Mitigation Schedule” showed a *-20 calendar day loss which is the same loss* as reflected in the *December 25, 2011* update. MWAA and DTP continue to negotiate the mitigation schedule related RFC’s 160

and 161 costs and anticipate a lump sum settlement in *March 2012*. *MWAA reported during the March 7, 2012 monthly meeting that they have agreed to the costs and are now working to come to an agreement on the scope related language for the change order.*

With regard to the West Falls Church Yard (WFCY) completion date, MWAA reported during the *March 7* monthly update meeting that on-going efforts continue to bring them closer to an agreement with DTP's request for change. DTP's schedule update of *January 25, 2012* continues to reflect a WFCY completion date of May 21, 2014. MWAA previously reported that Whiting-Turner, the WFCY contractor, presented a schedule showing the sound box completion in late 2013 and the S&I Shop completion in May 2014. However, MWAA now reports that they have a tentative agreement that *substantial completion of the S & I Building can be achieved in October 2013 and that they believe all work will be completed by December 2013. The WFCY schedule remains under discussion and refinement.*

- **Budget** status as of *January 25, 2012* indicates that \$1,757,600,575 (65%, excluding the remaining contingency and finance charges) has been expended of the \$3,142,471,634 budget total. MWAA reports \$223,385,859 (94%) of the available contingency for the first seven contingency milestones have been drawn down to date with a remaining contingency balance of \$13,114,141 (6%) available through the current phase of construction. **The federal portion of the Allowance Items recommended for award and yet to be awarded is estimated to be \$73.5 million over budget. This amount has not yet been drawn down. Therefore, the project could be officially over budget in the near future unless MWAA resolves the following issues.** MWAA acknowledges a \$71.8 million in potential source of an increase in contingency from a reduction in budgeted Finance Charges that they could use to make up a portion of this deficit. However, at the December 7, 2011 update meeting, MWAA indicated that the potential savings in finance costs will remain in that line item and not used for construction at this time. At the February 2, 2012 progress meeting, MWAA appeared to change their mind and plan to allow the finance cost savings to be re-allocated to contingency. MWAA will address this change in the near future. The PMOC is reviewing changes to the project scope since Preliminary Engineering that could be considered betterments (non-FFGA) or Concurrent Non-Project Activities (CNPAs), and met with MWAA after the *March 7, 2012 Update Meeting to discuss their findings. MWAA has committed to review their assessment of CNPAs and submit their results to the PMOC/FTA in mid-March.*

MWAA's estimate of the earned value for the Project through *January* is 69.9%.

- **Risk** -- The PMOC reviewed MWAA's updated Risk Assessment dated April 15, 2011. The PMOC and MWAA have met several times since then to review various revisions. MWAA submitted the Final Draft of RCMP – Rev. 2b on November 23, 2011. At the December 7, 2011 update meeting the PMOC expressed concern that the document did not address the PMOC's comments of November 18, 2011 relative to the Top Ten Risks and Risk Register, which was submitted by MWAA on November 10, 2011. Another meeting was conducted on January 4, 2012 to address these remaining issues. MWAA updated the top ten risks and the risk register, and separated risks R23 and R31 as discussed. During the February 2, 2012 follow-up meeting, the PMOC agreed with the changes and requested that MWAA incorporate them into the RCMP. *MWAA committed to resubmit the RCMP by March 14, 2012. MWAA submitted the revised draft RCMP to FTA/PMOC for review on March 5, 2012.*

FTA requested that MWAA update their Project Management Procedures to address Directive Letters and Contingency Drawdown Procedures as well.

- The Full Time Equivalents (FTE) estimated total for *February* is 1,630 which is an increase of 73 from the *January* actual of 1,557. A fluctuation of FTE's is to be expected as *spring approaches and more* systems work begins. The PMOC will *continue to* monitor this fluctuation to ensure that the project is appropriately managed to support the current "Mitigation Schedule."
- **Core Accountability Items**

FFGA-MWAA Core Accountability Items			
Project Status:		Original at FFGA:	Current Estimate*:
Cost	Cost Estimate	\$3.142B	\$3.142B
Contingency	Unallocated Contingency		
	Total Contingency (Allocated plus Unallocated)	\$297.76M	\$40.25M
Schedule	Revenue Service Date	December 1, 2014	December 27, 2013
Total Project Percent Complete		Based on Expenditures**	65%
		Based on Earned Value	69.9%
Major Issue	Status	Comments/Action/Planned Action	
<i>Contingency/CNPAs</i>	<i>Project Partners have added additional activities to the project that will increase the project cost and are not part of the FFGA-funded scope of work.</i>	<i>PMOC is reviewing whether proposed items are within the project scope. Grantee is also reviewing items that may be outside project scope.</i>	
Date of Next Quarterly Meeting:		May 9, 2012	

Note: * Through January 2012

** Excluding remaining contingency and finance charges

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 (non-FFGA) and billed to the responsible parties. It is the PMOC's opinion that the change orders for WMATA-requested ETS and TPSS Remote Monitoring systems are outside MWAA's Intergovernmental Agreement

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

The estimated cost *overruns* of the remaining Allowance Items (\$73.5M) indicate that there is an immediate need to replenish the project contingency. **Given the forecasted magnitude of the Allowance Items costs, the federal portion of the Project is, in the PMOC's opinion, on track to exceed the FFGA budget, if the Concurrent Non-Project Activities (CNPAs) are not removed.** The PMOC continues to review both the use of contingency and the changes that can be considered CNPAs to determine the possible shortfall in contingency. *MWAA reported during the March 7, 2012 monthly meeting that it would be replenishing the project contingency. PMOC met with MWAA after the March 7th Update Meeting to review its findings with regard to CNPAs. MWAA indicated that they expected to have their preliminary analysis of CNPAs available in mid-March.*

Following many months of disagreements over the schedule critical path, the Project is now working according to an agreed "Mitigation Schedule". The mitigation schedule with a data date of January 25, 2012 with a -20 calendar variance to the contract schedule reflects an SSCD of September 12, 2013. MWAA issued Directive Letter #35 on November 1, 2011 to authorize implementation of the Mitigation Schedule. Associated cost negotiations are currently underway with an anticipated lump sum settlement expected in late March 2012. This schedule does not include the West Falls Church Yard construction, which is currently scheduled for a May 21, 2014 completion. *MWAA continues to negotiate with DTP and is expecting to reach agreement on a date of December 2013 for completion of the WFCY. It remains the PMOC's opinion that the Project could be in revenue service within the FFGA specified date of December 1, 2014.*

Kawasaki's ongoing struggle to address the impacts of the March 2011 earthquake and tsunami continues to be a concern to the PMOC. On December 21, 2011, WMATA approved a mitigation contract schedule that forecasts a delivery date of the 64th DCMP rail cars on June 12, 2015. This schedule does not meet the FFGA Revenue Service Date (RSD) date of December 1, 2014. The FTA Regional Administrator for Region III was formally informed of the delay via MWAA Letter dated January 31, 2012. In this letter, MWAA writes "WMATA has stated that they would be able to provide sufficient rail cars from their existing fleet to begin service on the extension until the new Kawasaki rail cars are available. Therefore, we expect no impact to the FFGA, other than the late delivery of the rail cars." In the *PMOC's* opinion, WMATA's struggle to meet current daily car requirements makes questionable their ability to provide the additional cars required for the Dulles Phase 1 testing and revenue service and therefore full revenue service by the FFGA RSD is still in jeopardy. The PMOC continues to monitor WMATA's daily railcar availability statistics to see if WMATA is improving railcar availability. *WMATA has developed an interim operating plan for dealing with the delay. However, the plan calls for using only six car trains. This issue remains a concern of the FTA and PMOC.*

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.

The Project Schedule was updated by DTP through *January 2012*. In this update DTP reported a possible delay of -20 calendar days to the SSCD which is forecasted by DTP to occur on *September 12, 2013*. DTP's Critical Path No. 1 in their *January 2012* Schedule Update originates with the *LG #2* precast segmental erection of *the Tysons West Aerial Guideway*. MWAA completed its schedule review and, accepted the schedule and critical paths with some comments and exceptions on *February 21, 2012*.

- MWAA continues to monitor expenditures to date and to update the estimate at completion. Through *January 25, 2012*, MWAA has drawn down \$223,385,859 of the Phase 1 through 7 allotted contingency of \$236,500,000. The contingency utilization reflects expended costs. There is an additional \$34.1 million in obligated contingency in Phases 8 through 12.
- MWAA submitted the latest revision of the RCMP (*Revision 2c*) to the FTA on *March 5, 2012*. For details, see section 3 "Project Management Plan and Sub-plans" below.

- The Quality Assurance (QA)/Safety group maintains an active schedule of audits and surveillances and accident data.

Through *February 2012*, of the cumulative total of 9,553,666 hours worked, there have been *four* lost time accidents.

Revision 5 of the Safety and Security Certifiable Items List (SCIL) has been reviewed and all comments have been resolved. DTP's final resubmission on November 18, 2011 was subsequently accepted by MWAA. The SCIL for K99 (West Falls Church Yard) was received by MWAA on December 21, 2011 separately from the entire SCIL for review and comment. *Informal comments for the K99 SCIL were provided to DTP on February 14, 2012 and a meeting to discuss the comments is scheduled for March 8, 2012.* Once the K99 review is completed, DTP will submit Revision 6 of the SCIL in its entirety with K99 included.

DTP submitted revisions to the System Safety/Security Management Plan (SSMP) and DTP Procedures PPQ 01.06.02, Development and Maintenance of the Safety/Security Certifiable Items List and PPQ 01.06.03, Design Conformance Certification that MWAA accepted on December 6, 2010. The FTA and PMOC met with MWAA, WMATA, and DTP on April 29, 2011 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 meeting was conducted with all parties on January 27, 2012 to review the progress made thus far. WMATA is *expected to complete* a revision of the SSCPP in *early March 2012* and will review MWAA's SSMP Revision 9 to identify possible changes. MWAA anticipates issuing SSMP Revision 9 by mid-March 2012.

c. Compliance

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

MWAA submitted updates to the Amended Record of Decision Summary Mitigation Report to the FTA for the fourth quarter of 2011 on January 31, 2012.

2. Project Scope

a. Design Status

Except for the *Tyson's 123 and Tyson's West Station* pedestrian bridges and pavilions, DTP has completed design work with the receipt of permit approvals on the station designs. Issued for Construction (IFC) drawings for all five stations have also been completed. WMATA review and approval of ATC submittals continues to meet the needs of the project.

Revised designs for the Tysons Central 123 and Tysons West Station pedestrian bridges and pavilions are near their final permitting stages and are expected to be complete in *March* 2012. The late issuance of IFP and IFC design packages has had no apparent adverse impact on the project's critical path, due in part to DGS permitting of partial packages. However, *these* remaining design packages *noted above* continue to accumulate negative float on the Project schedule.

b. Bidding and Construction Status

Through *January* 2012, DTP has awarded \$349,579,148 of the \$437,278,511 federally funded Allowance Items Budget to subcontractors and suppliers with a \$54,800,007 overrun for 31 of 36 sub-contract packages awarded thus far. In addition, MWA has Allowance Items recommended for Award, but not yet awarded, worth \$199.3 million, which is \$73.5 million over budget. The \$73.5 million does not include the *remaining* allowance items *yet to be awarded*, including Pavilion and Pedestrian Finishes (C3), Stonework and Tile (C3), Pedestrian Bridge Installation (C5), Installation of Public Art (C7), Spare Parts (C11), and Traction Power Supply – WP.10C [Instrument and Fiber Optic Cable] (C13).

Utility relocation is 99% complete, and DB construction is approximately 67% complete. Remaining utility relocation involves the installation of traction power ductbank and manholes for bridge crossings along the DIAAH from Route 7 to Route 267 and along the DCR between Route 123 and the WMATA K-Line.

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

- **Operations Areas OP-1, OP-2 and OP-3 (I-66/DCR/Laydown Area 1)** – *Continued installation of acoustical barriers on the O-1 guideway segments. Continued installation of ATC cabling and equipment during non-revenue hours at the K-line. Installed traction power cables from the K-Line to Fisher Avenue during the single track outages in February. Continued installation of cable troughs adjacent to new ballasted track at the K-line area. Continued installing conduits inside the existing TPSS at Fisher Avenue. Continued with ATC testing inside the Train Control Room at Fisher Avenue. Continued installation of the special track work and ballasted track west of the WFCY lead tunnel in the DCR median. Continued installation of track emergency guardrail on the O-1 Guideway. Continued surfacing and aligning ballasted track between Idyllwood Road and the Tysons East Guideway abutment. Continued construction of Stage 2B of the WFCY Cut and Cover Tunnel in the right lane of the EB DCR. Completed installation of electrical manholes inside of the WFCY. Continued installation of the waterline and fire hydrant outside of the WFCY. Delivered and set TCR prefabricated facility at the TBS #2 site.*
- **Operations Area OP-4/5A (Tysons East Guideway/Station/I-495 Crossing)** – *Continued segmental box girder guideway erection with Truss LG1 completing spans 46-IB, 46-OB, 47-IB and 47-OB for a total of eighty-two spans completed to date. Continued emergency guardrail and direct fixation track installation on the guideway west of the double crossover. Continued rebar and concrete construction of the platform slab on the bulb tees at the Tysons East Station. Continued setting architectural precast panels and MEP installations at the Tysons East Station. Continued MEP installations at*

the Tysons East Station. Continued CMU installation of the mezzanine service rooms. Completed pile cap and column construction at the Tysons East pedestrian bridge pavilion at Colshire Drive.

- **Operations Area OP-5 (Tysons Central 123 Station)** – Completed pouring mezzanine columns. Continued setting precast architectural panels. Began erecting mezzanine structural steel. Completed welding rail strings between the Tyson Central 123 Station and Tysons East Guideway and demobilized the flash butt welding plant. Continued raceway installation for the AC switchgear room. Continued rebar and concrete construction of the platform slab.
 - **Operations Area OP-6 (Laydown Area #6/NATM Tunnel/East Cut & Cover and Ventilation Structure)** – Continued forming, rebar installation and pouring the fan room walls for the East Ventilation Structure. Continued backfilling operations at the east cut and cover tunnel. Continued installation of the direct fixation track and plinths in the IB tunnel and began track and plinth installation in the OB tunnel.
 - **Operations Area OP-6 (West Cut and Cover Tunnel)** – Continued column and wall installations at the West Ventilation Structure. Continued waterproofing and backfill of the West Cut and Cover Tunnel roof sections.
 - **Operations Area OP-7 (Tysons Central 7 Station)** – Continued forming and pouring barrier walls adjacent to Route 7. Continued to form and pour station columns. Began fireproofing structural steel at TPSS #5. Continued raceway installations for the AC and communications cables.
 - **Operations Area OP-8 (Tysons West Station/Guideway)** – Continued guideway segmental girder erection with Truss LG2 completing spans 33-IB, 33-OB, 34-IB, 34-OB, 35-IB, 35-OB, 36-IB, 36-OB, 37-IB and 37-OB for a total of fifty completed to date. Completed closure pours of the balanced cantilever segments at span 6 over Gosnell Road. Began rebar and concrete construction of the slab on grade at the ground level of Tysons West Station. Continued setting platform precast bulb tees at the Station. Continued installing acoustical panels on elevated guideway between Gosnell and Spring Hill Roads. Continued approach walls at Abutment B.
- Operations Area OP-9 (DIAAH)** – Continued construction of retaining walls on both OB and IB sides between Hunter Mill Road and the Tysons West abutment B. Continued ductbank construction for TPSS #7. Removed sheet pile SOE at TPSS #10. Continued installation of ballast and track between the W&OD Trail and Wiehle Avenue.
- **Operations Area OP-10 (Wiehle Avenue Station/Laydown Area 13)** – Continue MEP installations at the east and west platform service rooms and at the mezzanine level. Set AC switchgear in the station Switchgear Room. Started light fixture installation in the mezzanine service rooms. Started ceiling panel installation at the mezzanine level. Started installation of the station service rooms doors. Started pile driving at the south side of the Dulles Toll Road for the pedestrian bridge foundation. Poured the pile cap for the intermediate pedestrian bridge pier #6 at the south side of the station. Completed installation of steel H-piles for the land bridges at the Williams Transco pipelines west of

the Wiehle Avenue Station. Continued ballasted track construction west of the Wiehle Avenue and on the IB track through the Wiehle Avenue Station.

- **Laydown Area 10 (Pre-cast Yard)** – Continued staging and load out of precast segments for Tysons East and Tysons West Guideways.

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

c. Real Estate

Real Estate Acquisition continues to keep ahead of construction requirements, often resorting to ROE to gain access to required parcels. Through *February 2012*, 95 of the 102 parcels required for the Project have been acquired. The table below summarizes acquisition activities for the Project through *February 2012*.

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	21	(2)
Route 7	51	0	0	0	51	49	(2)
DIAAH	27	0	1	1	27	24	(3)
TOTAL	102	0	1	1	102	95	(7)

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

Condemnation Status

Thirty-nine parcel packages have been obtained with the filing of *thirty-three* Certificates of Take. *In February 2012, the Final Order for one case was filed (Parcel 76, Oakcrest School), one case remains in the early stages for an Agreement after Certificate (Parcel 109, AG/ARC Plaza America), and five other cases continued to move toward having the Final Order entered for Agreements After Certificate (Parcel 35, Embassy Suites; Parcel 28, Stohlman; Parcel 29, Westpark Corporation Center, LLC; Parcel 56, HBL Mercedes/George C. Andreas, TR, et al; and Parcel 23, Pike 7). There are two cases scheduled for Trial: Parcel 69-Wolf Trap Foundation for the Performing Arts on March 5, 2012, and Parcel 54/117-KBS Tysons Dulles Plaza, LLC on August 12, 2012.*

d. Utility Coordination

Utility relocation work continued through *February 2012* and is considered to be 99% complete. DTP’s utility relocation design team continues to address conflicts or field conditions when required and to coordinate all modifications with the A&R D-B contract

requirements. Installation of facilities for each third party utility has been completed in Tysons Corner and all utility companies have completed the local tie-in conduits and cables required to modify their circuits in compliance with the overall Project utility design. All UR work along Route 7 is complete.

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

- **Dulles Connector Road (DCR) East – (K-Line to Route 123)** – *Lane continues to pull mandrels through conduits and punch list work on the traction power duct bank and for bridge crossings. DVP installed hand holes and switch pads at the TPSS #1 site. DVP began pulling 34.5 KV traction power cables in the DCR median from Magarity Road to the east.*
- **Route 123 (DCR to Route 7)** – *No work in this area in February. Punch list work remains.*
- **Route 7 (Tyco/Westwood to Dulles Toll Road)** – *DVP continued pulling 34.5 KV traction power cables into ductbanks on Tyco Road and adjacent TPSS#6. DVP began installing hand holes and switch pads at the TPSS #6 site.*
- **DIAAH West -- (Route 7 to Wiehle Avenue)** – *Lane continued to pull mandrels through conduits and punchlist work on traction power duct banks and for bridge crossings. Completed installation of the traction power conduits on the Hunter Mill Road, Difficult Run and W&OB Bridges.*

e. Vehicle Procurement

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

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

On December 3, 2010, WMATA confirmed in a letter to MWAA "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. Since there would be 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 Conceptual Design Review phase was completed on January 31, 2011 and the program moved into the Preliminary Design Review (PDR) phase. The last of the initial PDRs was completed with the Truck PDR, which underwent review on November 29-30, 2011. WMATA reported that all PDR engineering meetings have been completed and only one PDR deliverable remains with an expected submission in late February 2012, more than eleven months past the baseline schedule date of March 30, 2011. The meeting for Carbody FDR took place on *February 1-3, 2012* in Japan. *At the 7K Monthly Progress Review meeting held on February 9, 2012, Kawasaki reported that the current Preliminary Design Review (PDR) phase completion date is March 16, 2012 compared to the baseline completion date of March 30, 2011. All PDR CDRLs have been submitted and 89% have been approved. The current Final Design Review (FDR) completion date is May 18, 2012 compared to the baseline completion date of October 24, 2011.*

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. On December 21, 2011, WMATA approved Kawasaki's Mitigation Schedule with a June 12, 2015 delivery date for the 64th railcar, which is more than six months beyond the FFGA completion date for the DCMP. MWAA formally informed the FTA Regional Administrator for Region III in a letter dated January 31, 2012.

The contractual milestones for this procurement are:

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

WMATA has developed an interim operations plan for dealing with the delay. However, the plan calls for no eight car trains and all six car trains. This issue remains a concern of the FTA and PMOC. The PMOC continues to monitor both the progress of the procurement and WMATA's management.

f. Safety and Quality Status

MWAA participated in *four* safety walk downs with DTP during the month of *February*. All were related to Design-Build work. As of *February 29, 2012*, DTP had logged 9.553 million project man-hours with *284 first aid cases* and *four* lost time cases. There have been a total of *647* incident investigation reports, 82 utility hits and 15 vehicular accidents.

Revision 5 of the SCIL *was* reviewed and all comments resolved. MWAA received the SCIL for K99 (West Falls Church Yard on December 21, 2011, separately from the entire SCIL for review and comment. MWAA *provided* comments back to DTP on K99 SCIL on *February 14, 2012* and a meeting to discuss the comments is scheduled for *March 8, 2012*. Once the K99 review is completed, DTP will submit Revision 6 of the SCIL in its entirety with K99 included.

DTP and MWAA continue to meet every two weeks to review the status of issued for construction designs (including subcontractor designs) and to determine the status of sign-offs of the Design Conformance Checklist (DCC) and Construction/Procurement/Installation Conformance Checklist (CCC) items related to all issued for construction designs. The FTA and PMOC have been expressing concern with the lack of progress on both the DCC and CCC submissions. In recent months, all partners have exchanged correspondence on these concerns and have been working together to address those concerns. However, it is apparent that the problems persist since MWAA reports that its review of DCC No. 7 “found excessive serious discrepancies” and rejected the submittal. MWAA also noted that a Corrective Action Report (CAR) has been issued to DTP Engineering due to the procedural deficiencies noted during the review. Responses to the CAR were received on January 19 and 24, 2012 and *an additional response is still outstanding*. DTP indicated in their responses that issues related to Submission No. 7 are to be resolved by *mid-March 2012*. Submittal of Submission No. 8 has been delayed pending resolution of the issues with Submission No. 7.

It still appears to the PMOC that two DTP staff (one full time and one part time) tasked with managing the SCIL and sign-offs is insufficient and that they lack sufficient authority to make meaningful and timely progress. The DTP staff has been concentrating all their efforts on the correction of the DCC’s while the CCC’s continue to *lag*. *FTA suggested to MWAA that it may be time for the MWAA CEO to get involved in this matter*.

DTP submitted Construction/Procurement/Installation Conformance Checklist (CCC) submittal No. 3 on July 11, 2011 with only three signed-off items. MWAA rejected CCC No. 3 and returned it to DTP due to insufficient information. MWAA and DTP report that not many items have been signed off since many of the sign-off activities include large segments of work that need to be completely finished prior to sign-off; the majority of the CCC items are systems-related and most of the work thus far has been civil-related. The next CCC will be submitted in early 2012. A preliminary walk down of K98 (K-Line Tie-in) was conducted by MWAA, WMATA, DTP and the PMOC on December 14, 2011 in an effort to refine the CCC process and expectations of each partner prior to the CCC No. 4 submission. It was a good effort and helped identify what documentation support MWAA and WMATA would need from DTP to validate sign-off acceptance. However, no apparent progress has been

made since that December 14, 2011 track inspection *with the exception that MWAA reported that DTP intends to submit the K-98 sign-offs (20-25 items) with backup records for review on March 8, 2012. K98 is intended to serve as a model for the documentation required for sign-offs for the other segments.*

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 February 21, 2012. MWAA requested that the Startup, Testing and Commissioning Program (SITCC) be added to the agenda. It was reported that the access ladder designs and the delineation of the potential for drilling into the cantilever tendons were expected to be closed out at the March SCWG meeting.*

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 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.

MWAA submitted Draft SSMP Rev. 9 to the FTA, PMOC, WMATA and TOC on September 30, 2011. This draft still requires WMATA's input. A follow-up meeting was conducted with all parties on January 27, 2012 to review the progress made thus far. WMATA is currently completing revision of SSCPP and will review MWAA's SSMP Revision 9 to identify possible changes. MWAA plans to issue SSMP Revision 9 by mid-March 2012.

MWAA reported that WMATA has hired Delcan Transportation, Inc. to review all of the quality work done on the project and to develop a WMATA Project Acceptance Plan and Procedure. MWAA/QA met with Delcan on June 21, 2011 to discuss the effort.

During *February 2012*, MWAA performed the following QA audits/surveillances:

- *Quality Records Audit – DTP Civil Records: MWAA conducted an audit on February 6, 2012. There were three issues and two recommendations. A response is due in mid-March 2012.*
- *Flippo Construction: DTP/MWAA conducted an audit on February 8, 2012. There were four observations all closed during the audit.*
- *Quality Records – DTP Systems Records: An audit is currently underway.*

- *DTP Contractor and Subcontractor Construction Safety Programs: MWAA conducted an audit on February 29, 2012. There were two issues. A report is being prepared.*

The MWAA QA Audit and Surveillance Schedule through June 2012

<u>Tentative Date</u>	<u>Audit (A) Surv. (S)</u>	<u>Organization/Activity</u>	<u>Joint Audit/Surv.</u>	<u>Lead</u>
3/07-08/12	A	Truland Walker-Seal (Communications)	Y	DTP
3/12-13/12	A	Powell Electric (Power)	Y	DTP
3/14-15/12	A	Lane Construction (West Falls Church Yard)	Y	MWAA
3/21-22/12	A	Internal Audit by STV	N	STV
3/28-29/12	A	Alstom Signaling (Automatic Train Control)	Y	DTP
4/04-05/12	A	F.H. Paschen (Station Finishes)	Y	<i>DTP</i>
4/11/12	S	DTP Subcontractor/Supplier Submittal Process: DTP/Subcontractors Nonconformance Control Systems	N	MWAA
4/12-13/12	S	DTP Environmental	N	MWAA
4/18-19/12	A	Turner Construction (Shell Enclosure Trades)	Y	DTP
4/25-26/12	A	Special Inspector CTI QA Program	N	MWAA
5/02-03/12	A	Kone (Elevators and Escalators)	Y	DTP
5/09-10/12	A	DTP Startup and Test Program	Y	MWAA
5/16-17/12	A	A&A Industrial (Tunnel Ventilation)	Y	DTP
5/30-31/12	A	Delta Construction Company	Y	DTP
6/06-07/12	A	DTP System Safety and Security Program	N	MWAA
6/13-14/12	A	Facchina Construction	Y	MWAA

3. Project Management Plan and Sub-plans

The FTA accepted MWAA's **Project Management Plan (PMP)** Version 7.0 Final on February 14, 2011.

- MWAA submitted a revised **Quality Program Plan (QPP)**, Revision 7 to FTA on January 7, 2010. MWAA reported that three Project Management Procedures were updated in the period from April through June 2011. No new QPP procedure updates were made during the period from July through January 2012.
- MWAA's **Real Estate Acquisition Management Plan (RAMP)**, Revision 2, dated September 15, 2009, has been reviewed by the PMOC with a recommendation that the FTA concur, with comments, with the revised RAMP. On January 21, 2010, the FTA provided comments to MWAA, and MWAA staff has revised Procedure PM-3.01 (Monitoring the Design-Build Contractor Property Acquisition Services). DTP revised their Procedure PIQ-5.1 (Property Acquisition Coordination) on November 1, 2010.

- **MWAA's Risk and Contingency Management Plan (RCMP)**, formerly called a 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 completed their risk plan update. A consultant submitted a draft of the Risk Analysis, a primary component of the RCMP, to MWAA in December 2010. MWAA and the PMOC discussed the draft on January 26, 2011 and determined that some refinements were needed. Numerous refinements and meetings to discuss those refinements occurred throughout 2011. MWAA submitted the Final Draft of RCMP – Rev. 2b on November 23, 2011. At the December 7 update meeting the PMOC expressed concern that the document did not address the PMOC's comments of November 18, 2011 relative to the Top Ten Risks and Risk Register that was submitted by MWAA on November 10, 2011. Another meeting was conducted on January 4, 2012 to address these remaining issues. MWAA updated the top ten risks and the risk register and separated risks R23 and R31 as discussed. During the February 2, 2012 follow-up meeting, the PMOC agreed with the changes and requested that MWAA incorporate them into the RCMP. FTA requested that MWAA update their Project Management Procedures to address Directive Letters and Contingency Drawdown Procedures as well. *MWAA submitted the revised RCMP Rev. 2c on March 5, 2012, which is under review.*
- 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 Submitted RFMP Rev4B to the FTA on October 21, 2011. The PMOC reviewed the document and submitted comments to WMATA on November 7, 2011. *FTA met with WMATA staff to discuss any remaining items on January 20, 2012, and WMATA submitted another draft RFMP in February. FTA and the PMOC provided some additional comments and the final plan is expected to be submitted by the end of March 2012.*
- **Safety and Security Management Plan (SSMP)** see Section 2f.

4. Project Schedule

Mainline - The most recent MWAA analyzed project “Mitigation Schedule” update has a data date of *January 25, 2012*. The primary critical path identified by DTP showed a -20 day loss as *which was the same* as reflected in the *December 25, 2011*. DTP’s schedule shows the Revenue Service Date to be *January 16, 2014*. *This schedule update reflects the WFCY work completion, although final agreement between DTP and MWAA has not been reached*. The FFGA RSD is December 1, 2014. MWAA completed its schedule review and wrote letter 06282 dated *February 21, 2012* which *accepted the schedule and critical paths with some comments and exceptions*.

This mitigation schedule supersedes the previously approved recovery schedule with a data date of December 25, 2010 that was finally settled at \$7.2M in mid-September 2011 but does not relieve DTP from their obligations to the earlier recovery schedule. MWAA and DTP continue to negotiate the mitigation schedule related to RFC160 and RFC161 and anticipate a lump sum settlement in late *March 2012*. *MWAA reported in this meeting that they have a cost agreement and are currently debating the scope language for the change order*.

MWAA and DTP continue the ongoing and ever changing deliberation process of determining weather related excusable delay days as reflected in the table below.

Excusable Days of Delay through *January 25, 2012*

ACTION	WORK DAYS
Total Excusable Days of Delay on Project Critical Path requested by DTP	52
Contractually Identified	18*
Retracted by DTP	3*
Denied by MWAA	14*
Under evaluation by MWAA	0*
Granted by MWAA	17**

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

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

The WFCY completion date matter finally appears to be close to resolution. MWAA reported during the *March 7th* monthly update meeting that on-going efforts continue to bring them closer to an agreement with DTP’s request for change. DTP’s schedule update of *January 25, 2012* continued to reflect a WFCY completion date of May 21, 2014. MWAA previously reported that Whiting-Turner, the WFCY contractor, presented a schedule showing the sound

box completion in late 2013 and the S&I Shop completion in May 2014. However, MWAA now reports that they have a tentative agreement that *substantial completion of the S & I Building can be achieved in October 2013 and that they believe all work will be completed by December 2013. The WFCY schedule remains under discussion and refinement.*

It appears to the PMOC that the mainline schedule losses are currently under control and are being recovered. However, the WFCY delays and their impact on the yard completion and mainline start-up activities and RSD remain a concern. *Despite the WFCY delays, the PMOC feels that the project can be completed before the FFGA RSD of December 1, 2014.*

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

- DTP's non-performance in meeting recovery schedule dates in Stations and Aerial Guideways causing delays to Delta's access for track installation.
- DTP's non-performance in heavy civil construction operations, i.e. installation of retaining walls, ductbanks and manholes, jack & bore operations project-wide causing delays to Delta's access.
- Obtaining required weekend outages from WMATA for the K-Line Tie-in work.
- Potential WMATA systems upgrade programs requested by WMATA could have numerous technical scope changes affecting Traction Power, Automatic Train Control, and Communications.
- Downtimes and lack of performance associated with LG #2 coupled with DTP's lack of resources to address this deficiency.
- WFCY construction and commissioning schedule is yet to be finalized by DTP and agreed upon (currently separate from the Project SSCD).
- Availability of sufficient number of rail cars from the existing WMATA fleet.
- Additional delay to delivery of the 64 Rail Cars for Phase 1.

a. Critical Path Evaluation

Since November 1, 2011, the Project is managed utilizing the work plan set forth in MWAA's November 1, 2011 Directive Letter to implement a Mitigation Schedule with a data date of October 25, 2011. In DTP's December 2011 Schedule Update, Critical Path No. 1 was LG#1 precast segmental erection operations on the Tysons East Guideway. It *reflected a -20 calendar day float. However, the January 2012 schedule update, which also reflected a -20 calendar day float reflecting a September 12, 2013 SSCD, shift the Critical Path No. 1 to the LG #2 precast segmental erection operations on the Tysons West Guideway. This was a strategic change that involves the utilization of LG #2 to finish the Tysons West Guideway instead of relocating the LG #1 and working both girder cranes to complete the Guideway. The time consuming dismantling and erection process for LG #1 was no longer considered to be of value to meeting the contract schedule.* MWAA completed its schedule review and wrote letter 06282 dated February 21, 2012 providing agreement but with some schedule logic and omission exceptions as follows:

1. *DTP did not assign appropriate durations for segmental erection of spans which could be potentially impacted by erection over live traffic and complexities involving "drop-in" spans and launching the truss over abutment supports. MWAA's analysis*

shows that completion of the Tysons West Aerial Guideway will take approximately 20 calendar days longer than forecast by DTP.

2. *DTP's continued re-sequencing of activities and changing of their durations to mitigate delays result in significant deviations from the agreed plans. More critical activities are now stacked up as a result of this re-sequencing.*

The PMOC agrees with MWAA's assessment regarding the critical path. MWAA continues to analyze the schedule carefully and to hold DTP accountable for changes made to the agreed schedule. The amount and degree of disagreement is much less than was experienced in past months. The detailed review and approval/agreement process also demonstrates the on-going refinement of the scheduled activities to achieve a beneficial efficiency to the project schedule. MWAA and DTP are currently implementing an agreed Mitigation Schedule as of November 1, 2011. However, the PMOC anticipates that new disagreements will continue to arise for claimed weather delays and change order impacts to the schedule. The project has now reached its 62% point in the contract schedule and, therefore, these ongoing and new issues will continue to increase 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	December 2011	January 2012
Receipt of FFGA	03/03/09 ¹	03/10/09 A	03/10/09 A	03/10/09 A
Station Design Complete	10/21/09	02/18/11	10/28/11 A	10/28/11 A
Utility Relocation Complete	03/05/10	09/13/11	3/01/12	3/01/12
Aerial and 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	10/14/11 A	10/14/11 A
Guideway Complete	2/12/12	09/13/12	10/24/12	10/24/12
Train Control Complete	10/26/12	10/29/12	12/20/12	12/20/12
Substantial Completion	07/31/13	07/31/13	09/10/13	9/12/13
Revenue Operations - Target	11/27/13	01/20/14	01/14/14	1/16/14
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:

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

5. Project Cost

The SCC Budget and Expenditures summary for the period ending *January 25, 2012* is as follows. Overall, approximately 65% of the budget (excluding contingency and finance charges) has been expended.

FTA SCC CODE	DESCRIPTION	BASELINE BUDGET	CURRENT BUDGET ¹	EXPENDED TO DATE	ESTIMATE AT COMPLETION
10	Guideway and Track Elements	\$ 666,500,284	\$ 653,434,350	\$ 515,944,483	\$ 653,434,350
20	Stations	\$ 317,023,979	\$ 307,849,928	\$ 131,397,454	\$ 307,849,928
30	West Falls Church Yard	\$ 51,789,539	\$ 41,527,907	\$ 6,662,292	\$ 41,337,876
40	Site Work & Utility Relocation	\$ 232,936,987	\$ 241,060,618	\$ 199,440,703	\$ 270,317,138
50	Systems	\$ 278,157,645	\$ 313,879,263	\$ 117,621,055	\$ 310,729,378
60	Right of Way Acquisition	\$ 45,953,303	\$ 67,631,026	\$ 60,051,443	\$ 65,011,618
70	Vehicles	\$ 211,629,775	\$ 211,629,775	\$ 33,803,886	\$ 210,926,012
80	Professional Service	\$ 698,471,472	\$ 717,483,957	\$ 626,879,951	\$ 772,870,177
90	Contingency Mgmt. Reserve	\$ 130,000,075	\$ 77,990,240	\$ -	\$ 10,586
100	Finance Charge	\$ 509,984,571	\$ 509,984,571	\$ 65,799,308	\$ 509,984,571
TOTAL (Federal portion)		\$ 3,142,471,635	\$ 3,142,471,635	\$ 1,691,646,353	\$ 3,142,471,635

1) Current budget equals FFGA amount plus approved Change Orders CO-001-081, 083-088, 099-101 & 103-108 & 111, Directive Letters 001-033 & 36-38, UR-CO-001-039.

2) Estimate at Completion (EAC) for Contingency reflects the amount approved for utilization per PM-5.07 Rev4

3) The Estimate at Completion of Finance Costs includes \$71.8 million in allocated contingency.

a. Explanation of Variances

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

1. SCC10 – Guideway and Track Elements has been reduced approximately \$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 \$17 million. The decision by the Airports Authority to remove the Wiehle Avenue Parking Garage – Allowance Item C-2, due to the Fairfax County Joint Development project, allowed the transfer of \$29.1 million out of the direct account into the unallocated contingency account. This was offset by a combination of add and subtract change orders, the most notable addition being the transfer from the tunnel subcontract.
3. 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 cost 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 increases primarily due to adjustment of project cost for the revised federal/non-federal split along Route 7.
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 attributed to higher project management costs for MWAA, PMSS and VDOT. In addition, WMATA budget transfers are treated as forecast adjustments.
7. SCC90 – Contingency Management Reserve estimate at completion of \$10,586 is available for future use. The PMOC is of the opinion that the contingency reserve needs to be increased based on the current status of the contract and potential overruns for Allowance Items.

b. Monthly Cost Report, January 2012

DESCRIPTION	FFGA AMOUNT (Original)	EXPENDITURE TO DATE ¹	ESTIMATE TO COMPLETE	ESTIMATE AT COMPLETION	PERCENT OF EAC EXPENDED TO DATE ⁷
FEDERAL (FFGA SCOPE)					
Design-Build					
Firm Fixed Price	\$ 1,112,052,172	\$ 1,153,280,223	\$ 421,911,555	\$ 1,575,191,778	
Firm Fixed Price Insurance and Bonds	\$ 65,109,408	\$ 67,026,436	\$ 2,673,832	\$ 69,700,267	
Firm Fixed Price Subtotal	\$ 1,177,161,580	\$ 1,220,306,659	\$ 424,585,387	\$ 1,644,892,045	
Subcontract Allowance	\$ 430,199,817	\$ -	\$ 131,449,620	\$ 131,449,620	
Design-Build Contract Prices	\$ 1,607,361,397	\$ 1,220,306,659	\$ 556,035,006	\$ 1,776,341,665	
Indexed Commodity Escalation	\$ 77,469,926	\$ -	\$ 47,309,745	\$ 47,309,745	
Design-Build Contract Total	\$ 1,684,831,324	\$ 1,220,306,659	\$ 603,344,752	\$ 1,823,651,410	67%
Utility Relocation					
Utility Work	\$ 84,312,807	\$ 100,186,668	\$ 10,000,847	\$ 110,187,515	
Terf Tax	\$ -	\$ -	\$ 0	\$ 0	
Project Management and Final Design	\$ 8,423,426	\$ 19,684,611	\$ 600,029	\$ 20,284,640	
Utility Relocation Total	\$ 92,736,233	\$ 119,871,279	\$ 10,600,877	\$ 130,472,155	92%
Right of Way					
Right Of Way Total	\$ 42,443,132	\$ 60,341,107	\$ 5,295,511	\$ 65,636,618	92%
WMATA Agreement					
Vehicles	\$ 195,138,329	\$ 33,803,886	\$ 160,630,680	\$ 194,434,567	
Construction and Procurement	\$ 31,484,799	\$ 3,265,012	\$ 24,833,105	\$ 28,098,117	
WMATA Force Account Startup	\$ 13,777,100	\$ 2,993,022	\$ 10,411,999	\$ 13,405,021	
Project Management and Final Design	\$ 31,235,400	\$ 18,012,158	\$ 17,685,766	\$ 35,697,924	
WMATA Agreement Total	\$ 271,635,628	\$ 58,074,078	\$ 213,561,550	\$ 271,635,628	21%
Preliminary Engineering^{2,3}					
Preliminary Engineering Total	\$ 100,968,646	\$ 100,730,999	\$ -	\$ 100,730,999	100%
Airports Authority Services					
General Conditions ⁴	\$ 28,879,153	\$ 7,107,239	\$ 22,923,272	\$ 30,030,512	
Airports Authority Project Management and Wiehle Ave Garage	\$ 23,225,717	\$ 26,698,553	\$ 19,681,269	\$ 46,379,822	
Project Management Support	\$ 90,004,649	\$ 98,671,353	\$ 25,022,865	\$ 123,694,218	
Airports Authority Services Total	\$ 142,109,519	\$ 132,477,146	\$ 67,627,406	\$ 200,104,552	66%
Contingency⁵					
Contingency Total	\$ 297,762,579	\$ -	\$ 40,255,701	\$ 40,255,701	
Finance Costs					
Finance Costs Total	\$ 509,984,571	\$ 65,799,308	\$ 444,185,263	\$ 509,984,571	
Total Federal (FFGA Scope)	\$ 3,142,471,634	\$ 1,757,600,575	\$ 1,384,871,060	\$ 3,142,471,635	65%

1 Reflects Paid costs through January 31, 2012

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

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

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

5 Estimate at Completion for Contingency reflects the amount approved for utilization per PM-5 07 Rev4

6 The Estimate at Completion for Finance Costs includes \$71.8 million in allocated contingency

7 Percent complete excludes contingency and finance charges

c. Project Funding Sources: *January 2012*

SOURCES OF CAPITAL FUNDING	GRANT ID	PERCENT AT COMPLETE	TOTAL	EXPENDED TO DATE ¹	PERCENT FUND SOURCE EXPENDED TO DATE	REMAINING
Sec 5309 New Starts Federal Funds						
Preliminary Engineering Grants			\$ 54,412,526	\$ 54,412,526	100%	\$ -
Final Design Grant	VA-03-0113-00		\$ 159,001,838	\$ 159,001,838	100%	\$ -
ARRA Construction Grant	VA-36-0001-00		\$ 77,260,000	\$ 77,260,000	100%	\$ -
FFGA Construction Grant	VA-03-0113-02		\$ 28,809,000	\$ 28,809,000	100%	\$ -
FFGA Construction Grant	VA-03-0113-03		\$ 85,000,000	\$ 85,000,000	100%	\$ -
FFGA Construction Grant ⁵	VA-03-0113-04		\$ 115,799,000	\$ 107,795,288	93%	\$ 8,003,712
FFGA Balance	Planned		\$ 379,717,636	\$ -	0%	\$ 379,717,636
Subtotal - New Starts		28.64%	\$ 900,000,000	\$ 512,278,652	56.92%	\$ 387,721,348
Other Federal Funds						
Sec 5307 Surface Transportation Program						
Construction Grant	VA-95-X056-01		\$ 47,218,109	\$ 47,218,109	100%	\$ -
Construction Grant	VA-95-X056-02		\$ 21,281,890	\$ 21,281,890	100%	\$ -
Construction Grant	VA-95-X056-03		\$ 6,500,001	\$ 6,500,001	100%	\$ -
STP/Sec. 5307		2.39%	\$ 75,000,000	\$ 75,000,000	100%	\$ -
Local Funds						
VTA 2000			\$ 51,700,000	\$ 51,700,000	100%	\$ -
Commonwealth Transportation Bonds ^{2,5}			\$ 125,000,000	\$ 113,433,213	91%	\$ 11,566,787
Fairfax County Funds ³			\$ 523,750,000	\$ 241,266,120	46%	\$ 282,483,880
Dulles Toll Road Revenues ^{2,4}			\$ 1,467,021,634	\$ 763,922,591	52%	\$ 703,099,043
Subtotal - Local Funds		68.97%	\$ 2,167,471,634	\$ 1,170,321,923	53.99%	\$ 997,149,711
Total Project Budget		100%	\$ 3,142,471,634	\$ 1,757,600,575	55.93%	\$ 1,384,871,059
Interrelated Highway Activities			\$ 123,208,229	\$ 78,705,520	63.88%	\$ 44,502,709
DTR Revenues/Commonwealth Funds³			\$ 123,208,229	\$ 78,705,520	63.88%	\$ 44,502,709
Total			\$ 3,265,679,863	\$ 1,836,306,095	56.23%	\$ 1,429,373,768

¹ Reflects costs through *January 31, 2012*.

² In January 2010, \$23.6 million previously identified as pay-go Dulles Toll Road (DTR) Revenues were reclassified as Commonwealth Transportation Board (CTB) funds, reducing the contribution from DTR revenues and increasing the contribution from CTB funds.

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

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

⁵ Expenditures includes accruals.

6. Project Risks

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

Budget Risks. Through *January 25, 2012*, MWAA reports that it has utilized \$223,385,859 (94%) of the \$236,500,000 available contingency for the first seven contingency milestones leaving a contingency balance of \$13,114,141 (6%) available through the current phase of construction. The contingency utilization reflects expended costs. MWAA estimates that Phase 3, Utility Relocation Program, will be fully completed in the first quarter of 2012. MWAA reports that it has already obligated \$34,121,021 of the \$61,262,579 available for Phases 8 through 12. As of *January 25, 2012*, of the \$297,762,579 total project contingency, the project has a total of \$40,255,699 available. However, MWAA estimates that the cost of the Allowance Items recommended for award, but not yet charged to the project is estimated to be \$73.5 million over budget. **Thus, the project may be officially over budget in the near future unless MWAA determines other courses of action.**

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

The projected overruns in the estimated costs of the remaining Allowance Items (\$73.5M) indicate that there is an immediate need to replenish the project contingency. **Given the forecasted magnitude of the Allowance Items cost overrun, the Project is, in the PMOC's opinion, on track to exceed the FFGA budget, if the betterments (*non-FFGA*) are not removed from the federal project.** The PMOC continues to review both the use of contingency and the changes that can be considered betterments (non-FFGA) to determine the shortfall in contingency. This matter *was again progressed during* a follow-up meeting on *March 7, 2012* between MWAA and the PMOC. Efforts are underway to arrive at an agreement as to what changes/budget overruns constitute non-FFGA expenditures and what should be FFGA expenditures. MWAA acknowledged that the FTA and VDOT budgets are fixed, that the other funding partners bear a percentage of the non-FFGA budget overruns; all principles understand *their financial responsibility* and all budget overruns will be managed according to the agreed funding plan.

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

The PMOC is reviewing changes to the project scope since Preliminary Engineering that could be considered betterments (non-FFGA) or Concurrent Non-Project Activities (CNPAs), *and met with MWAA after the March 7, 2012 Update Meeting to discuss their findings. MWAA has committed to review their assessment of CNPAs and submit their results to the PMOC/FTA in mid-March.*

MWAA's estimate of the earned value for the Project through *January 2012* is 69.9%.

Schedule Risks. With regard to Schedule Contingency, MWAA and DTP agreed to a zero loss recovery schedule with a data date of December 25, 2010. This recovery schedule had a mitigation period of fourteen months, extending from January 2011 through February 2012 to recover 113 calendar days of the total of 510 calendar days. MWAA and DTP are now working off a new Mitigation Schedule with a data date of October 25, 2011 that was accepted "as noted" on November 23, 2011. Through *January 2012*, MWAA has granted DTP time extensions of 23 (17 work days) calendar days reducing the available contingency from 510 to 487 calendar days.

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

Top 10 Project Risks

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

C20 = Included in previous top 10 listing

7. Action Items

MWAA – DULLES CORRIDOR METRORAIL PROJECT - Items for Grantee Action

PR	ITEM	IDENTIFICATION	NATURE of PROBLEM	D	A	I	COMMENTS	STATUS
1	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.	Y	Y	N	<i>During 2011, several iterations of the RCMP were submitted by MWAA and reviewed by the PMOC. A meeting was conducted on January 4, 2012 to address the remaining issues. MWAA updated the top ten ratings and the risk register and separated risks R23 and R31 as discussed. During the February 2, 2012 follow-up meeting, the PMOC agreed with the changes and requested that MWAA incorporate them into the RCMP. MWAA submitted the revised RCMP on March 5, 2012 which is under review.</i>	R
2	2A.04	Update Procedures PM5.01 (Processing DB Changes) and PM5.07(Management of Project Contingency)	Procedures need to include Directive Letters and Contingency Drawdowns.	N	N	N	These Procedures in support of RCMP need to be updated to include Directive Letters, Contingency Drawdown and top management control of contingency	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
CNPA	<i>Concurrent Non-Project Activities</i>
CPM	Critical Path Method
CR	<i>Communications Room</i>
CTI	CTI Consultants, Inc.
CY	Calendar Year
DB	Design-Build
DCC	Design Conformance Checklist
DCN	Design Change Notice
DF	<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
RSD	Revenue Service Date (synonymous with Revenue Operations Date)
SAIC	Scientific Applications International Corporation
SCC	Standard Cost Category
SCIL	Safety and Security Certifiable Items List
SOE	Support of Excavation
SSCD	Scheduled Substantial Completion Date
SSMP	Safety and Security Management Plan
SSWP	Site Specific Work Plan
STP	Surface Transportation Program
TBD	To Be Determined
TOC	Tri-state Oversight Committee
TPSS	Traction Power Substation
UR	Utility Relocation
VDOT	Virginia Department of Transportation
W&OD	Washington and Old Dominion
WFC	West Falls Church
WFCY	West Falls Church Yard
WMATA	Washington Metropolitan Area Transit Authority
XO	Executive Officer

APPENDIX B -- PROJECT OVERVIEW AND MAP

Project Overview

Date: *March 26, 2012* (reporting current through *February 2012*- Financials through *January 2012*)

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

Grantee: Metropolitan Washington Airports Authority (MWAA)

FTA Regional Contact: Brian Glenn, P.E.

FTA Headquarters Contact: Dale Wegner, P.E.

Scope

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

Ridership

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

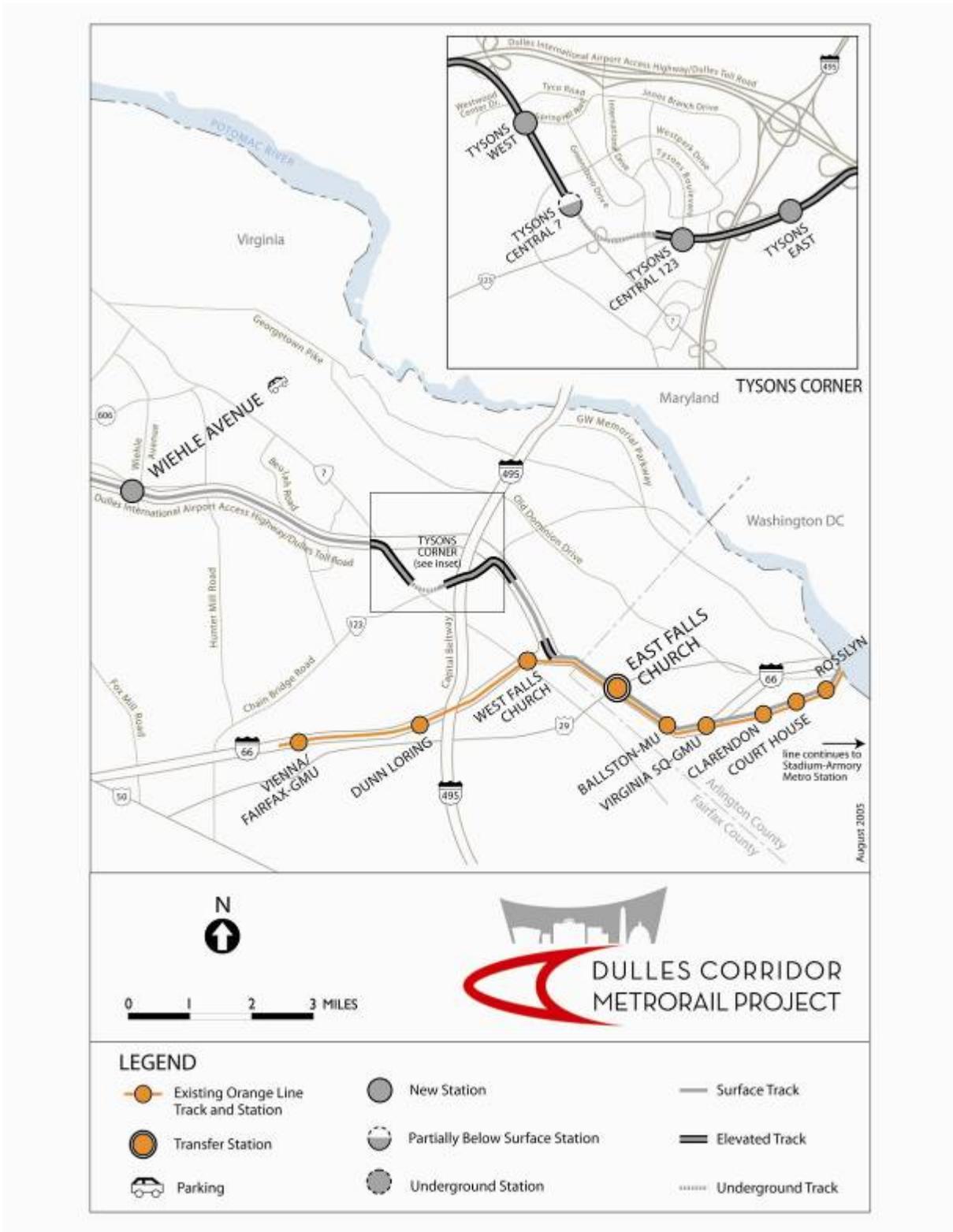
Schedule

06/10/04	Approval to Enter PE	2011	Estimated Rev Ops at Entry to PE
05/12/08	Approval to Enter FD	12/04/13	Estimated Rev Ops at Entry to FD
03/10/09	FFGA signed	12/01/14	Estimated Rev Ops at FFGA
01/16/14	Revenue Service Date (RSD) <i>as of January 25, 2012</i>		
67.0%	Percent Complete Construction <i>as of February 29, 2012.</i>		
52.0%	Percent Complete Time based on RSD of December 1, 2014 (based on FFGA)		
69.9%	MWAA's Estimate of Project Earned Value through <i>January 2012</i>		

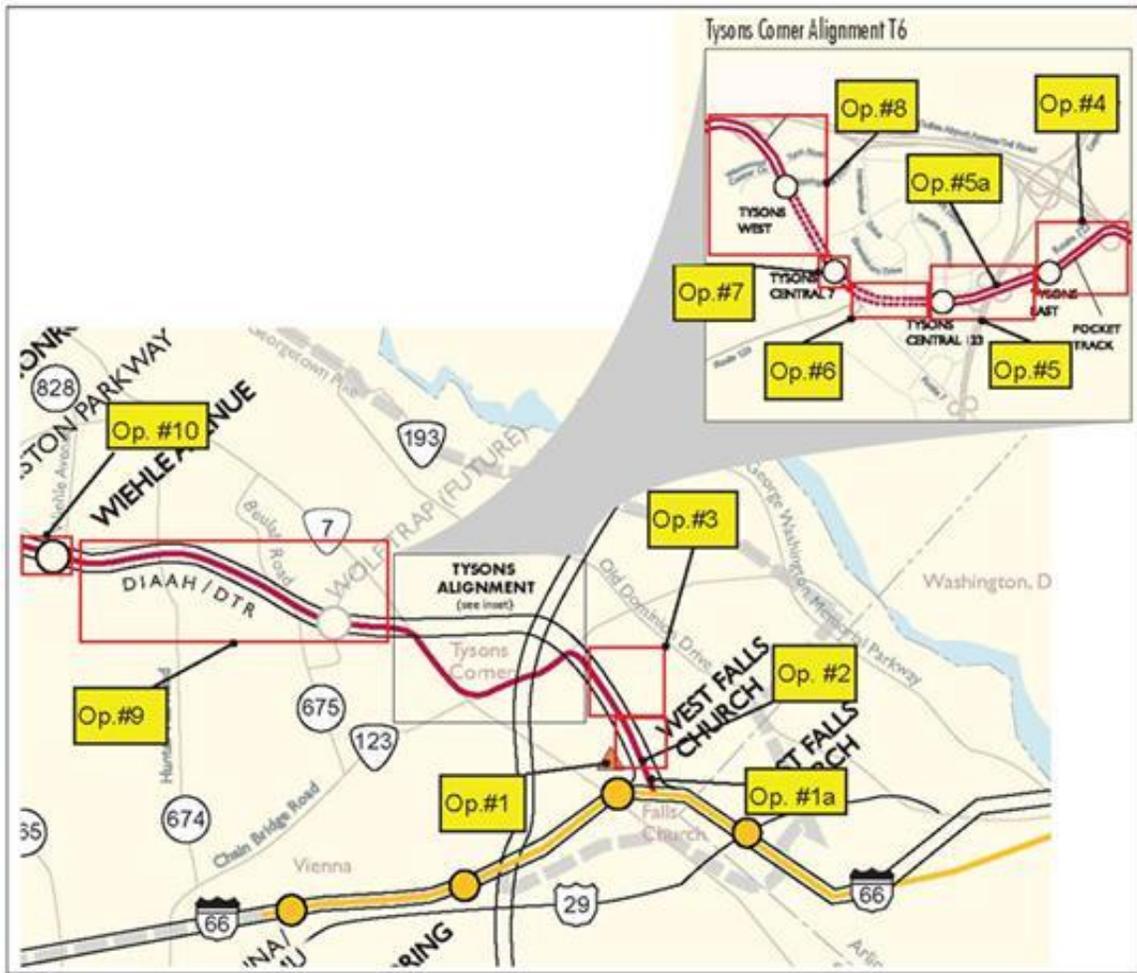
Cost

\$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
\$1.757 billion	Expenditures through <i>January 2012</i> from total project budget of \$3.142 billion.
65%	Percent complete based on federal expenditures excluding contingency and finance charges through <i>January 2012</i> .
\$40.25 million	Total project contingency remaining (allocated and unallocated) through <i>January 2012</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. MWAA's SSMP Rev.8 was submitted for review in February. At the April 29, 2011 meeting it was agreed that a SSMP and SSCPP would be developed to include the responsibilities of both MWAA and WMATA. A progress update meeting was held on January 27, 2012. MWAA and WMATA plan to have a completed joint SSMP by mid March 2012.
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 a representative at the November 9, 2011 QPRM.
Has the grantee submitted its safety certification plan to the oversight agency?	N	Plan in progress. TOC participates in monthly meetings.
Has the grantee implemented security directives issues by the Department Homeland Security, Transportation Security Administration?	N	WMATA will be operator.

SSMP Monitoring	Y/N	Notes/Status
Is the SSMP project-specific, clearly 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 will be operator.
Does the grantee maintain a regularly scheduled report on the status of safety and security activities?	N	WMATA will be operator.
Has the grantee established staffing requirements, procedures and authority for safety and security activities throughout all project phases?	N	WMATA will be operator.

Does the grantee update the safety and security responsibility matrix/organizational chart as necessary?	N	WMATA will be operator.
Has the grantee allocated sufficient resources to oversee or carry out safety and security activities?	N	WMATA will be operator.
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.	N	MWAA's letter of September 7, 2011 to WMATA indicated that they believed that such an evaluation is not required but that they would support WMATA if it chooses to conduct such an analysis.
Has the grantee ensured the development of safety design criteria?	Y	
Has the grantee ensured the development of security design criteria?	Y	
Has the grantee ensured conformance with safety and security requirements in design?	Y	
Has the grantee verified conformance with safety and security requirements in equipment and materials procurement?	Y	
Has the grantee verified construction specification conformance?	Y	
Has the grantee identified safety and security critical tests to be performed prior to passenger operations?	Y	In progress.
Has the grantee verified conformance with safety and security requirements during testing, inspection and start-up phases?	N	After SSCD
Does the grantee evaluated change orders, design waivers, or test variances for potential hazards and /or vulnerabilities?	Y	
Has the grantee ensured the performance of safety and security analyses for proposed work-arounds?	Y	

Has the grantee demonstrated through meetings or other methods, the integration of safety and security in the following: • Activation Plan and Procedures • Integrated Test Plan and Procedures • Operations and Maintenance Plan • Emergency Operations Plan	N	<i>In progress with WMATA.</i>
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. If the comparison is not favorable, what actions are being taken by the grantee to improve its safety record?	Y	DTP has recorded 337 first aid cases and three lost time cases in 8.298 million project man hours which is below the national average.
Does the grantee conduct site audits of the contractor's performance versus required safety/security procedures?	Y	

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

APPENDIX D – PMOC TEAM PERFORMING THIS REVIEW

[REDACTED]

[Redacted]