

**COMPREHENSIVE MONTHLY REPORT**

**September 2013**

**Dulles Corridor Metrorail Project  
Phase 2  
(Wiehle Avenue Station to Route 772 Station)**

Metropolitan Washington Airports Authority  
Washington, DC

October 29, 2013

**PMOC Contract Number:** DTFT60-09-D-00016

**Task Order Number:** 009, **Project Number:** DC-27-5242, **Work Order No.** 01

**OPs Referenced:** 01, 25

**Hill International, Inc.**

One Penn Square West

30 South 15<sup>th</sup> Street

Philadelphia, PA 19102

**PMOC Lead:** [REDACTED]

**Length of Time PMOC Assigned to Project:** 0.25years

**Length of Time PMOC Lead Assigned to Project:** 0.25 years

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>2</b>
1. PROJECT DESCRIPTION .....	2
2. PMOC’S ASSESSMENT OF PROJECT STATUS.....	5
<b>MAIN REPORT .....</b>	<b>6</b>
1. GRANTEE’S CAPABILITIES AND APPROACH .....	6
a. <i>Technical Capacity and Capability</i> .....	6
b. <i>Project Controls</i> .....	6
c. <i>Compliance</i> .....	7
2. PROJECT SCOPE .....	8
a. <i>National Environmental Policy Act (NEPA)/Environmental Assessment (EA)</i> .....	8
b. <i>Third Party Agreements</i> .....	8
c. <i>Design Status</i> .....	9
d. <i>Bidding and Construction Status</i> .....	9
e. <i>Real Estate</i> .....	13
f. <i>Utility Coordination</i> .....	14
g. <i>Vehicle Procurement</i> .....	14
3. PROJECT MANAGEMENT PLAN AND SUB-PLANS .....	14
4. PROJECT SCHEDULE.....	16
a. <i>Important Activities – 90-Day Look Ahead</i> .....	16
5. PROJECT COST .....	17
6. PROJECT RISKS .....	20
7. ACTION ITEMS .....	22
<b>APPENDICES.....</b>	<b>24</b>
APPENDIX A – <i>LIST OF ACRONYMS</i> .....	25
APPENDIX B – <i>PROJECT MAP</i> .....	26
APPENDIX C – <i>PMOC TEAM PERFORMING THIS REVIEW</i> .....	27

## EXECUTIVE SUMMARY

The Project Management Oversight Contractor (PMOC) met with Metropolitan Washington Airports Authority (MWAA) on *October 10, 2013* to conduct the monthly progress meeting for work performed in *September 2013* on Phase 2 of the Locally Preferred Alternative (LPA) for the Dulles Corridor Metrorail Project. The Phase 2 project extends from the Wiehle Avenue Station in Fairfax County through Dulles International Airport to the Route 772 Station in Loudoun County. The PMOC plans to conduct future PMOC monthly progress meetings during the first week of each month.

### **1. Project Description**

MWAA, in cooperation with the Washington Metropolitan Area Transit Authority (WMATA), proposes to implement a 23.1-mile rapid transit system in the Dulles Corridor of Northern Virginia. The proposed corridor follows the alignment of the Dulles International Airport Access Highway (DIAAH), the Dulles Toll Road within Fairfax County, and the Dulles Greenway, a private toll road in Loudoun County. MWAA is implementing the LPA in two phases as described below.

Phase 1 of the Project (Initial Operating Segment), which is nearing completion, 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. The procurement of sixty-four new rail cars is also included for Phase 1.

Phase 2 of the Project will provide 11.4 route miles of new track from the interim terminus at Wiehle Avenue Station through Washington Dulles International Airport ("Dulles Airport") to a terminus in eastern Loudoun County. Phase 2 includes six new stations (Reston Town Center, Herndon, Innovation Center, Dulles Airport, Route 606 and Route 772 Stations). Phase 2 also includes a maintenance and storage yard facility at Dulles Airport, five new parking facilities to provide a total of 8,900 parking spaces, wayside facilities (including traction power substations, tie-breaker stations, and storm water management ponds along the alignment), and sixty-four railcars. *The current Phase 2 project budget is \$3,126,450,757* exclusive of finance costs. According to the current schedule, Phase 2 Revenue Service would begin in early 2019.

### **Project Status Summary**

The PMOC met with MWAA on *October 10, 2013* to conduct the Phase 2 monthly progress review meeting. The information provided is as of *September 30, 2013*, unless otherwise noted.

- **National Environmental Policy Act (NEPA)/Environmental Assessment (EA)** – MWAA and FTA prepared an EA in April 2012 covering the preliminary engineering design refinements for Phase 2, which they released for public review on May 10, 2012. Subsequently, the FTA Regional Administrator issued a Finding of No Significant Impact (FONSI) on December 17, 2012.
- **Procurement Status** – A Project Management Support Services (PMSS) consultant, Jacobs Engineering, supports the MWAA management team to ensure technical capacity and capability. The contract for the PMSS was signed on July 26, 2013, and the first task order

was issued to the PMSS to provide staffing support. The PMSS provided support for Phase 2 for preliminary engineering under a separate contract that expired on July 26, 2013.

Phase 2 is divided into several packages that will be procured separately: Package A includes the final design and construction of 11.4 miles of the rail line, stations and systems elements; The Advanced Earthwork Contract (Package S) is for the removal and relocation of the Phase 1 soils currently stockpiled at the Maintenance Facility site associated with Package B. Package B includes the final design and construction of the WMATA Maintenance Facility at the northwest corner of the Dulles Airport property; and *Parking Garages* (formerly Package C) includes the design and construction of the five parking facilities at the stations in Fairfax and Loudoun counties. MWAA awarded the contract for Package A on May 14, 2013 and issued the Notice-to-Proceed (NTP) on July 8, 2013.

MWAA issued a solicitation for the Advanced Earthwork Contract on June 27, 2013 and bids were received on August 12, 2013. *The lowest bidder was found nonresponsive because it failed to demonstrate the required experience for its lead designer, and filed a protest. The protest has been denied by the MWAA Chief Executive Officer, which is the final step in the MWAA appeal process. The second lowest bidder was also found nonresponsive due to noncompliance with the Disadvantaged Business Enterprise (DBE) substitution requirements. On October 8, 2013, MWAA issued a Notice of Recommended Award to the third lowest bidder and MWAA anticipates having them under contract by the end of October 2013. The second lowest bidder sent a letter on October 10, 2013 asking for reconsideration, then filed a protest on October 14, 2013 relying on the reasons set forth in the October 10 letter. MWAA has stated that it will not award the Package S Contract until the protest process is completed.*

MWAA will issue a *Request for Qualification Information (RFQI)* solicitation for the Package B Contract in November 2013, with contract award by June 2014 and *Notice-to-Proceed* in July 2014.

- **Disadvantaged Enterprise Business (DBE) Goal** – MWAA developed a DBE Project Goal of 25% of federal participation cost for Phase 2 which was reviewed and accepted by FTA. Package A has a contract goal of 14%, the PMSS Contract has a goal of 25%, the Package S Contract has a goal of 25%; and the Package B goal is 14%. Fairfax and Loudoun Counties plan to procure the work in *Parking Garages* (formerly Package C) without the use of Federal assistance; therefore, there would be no DBE requirement.
- **Third Party Agreements** – MWAA reported that it requires six Intergovernmental Agreements for Phase 2: WMATA, the Dulles Greenway, Loudoun County, Fairfax County, Virginia Department of Transportation (VDOT), and the Town of Herndon. As of *October 10, 2013*, five of the six Intergovernmental Agreements have been executed. *The agreement with VDOT has been completed and is pending execution.*
- **Real Estate Acquisition** – MWAA submitted the Real Estate Acquisition Plan (RAMP) for Phase 2 on August 19, 2013. *At the PMOC's request, MWAA provided the Property Acquisition Listing on September 27, 2013.* The RAMP is currently under review by the PMOC.

- **Permits** – MWAA submitted the Permit Management Plan to FTA on August 16, 2013. PMOC reviewed and provided its comments in a draft spot report to FTA on October 8, 2013.
- **Design Progress** – MWAA reported that preliminary design for the Phase 2 Project was submitted and reviewed, with revisions required before it can be submitted for Authority Having Jurisdiction (AHJ) approval. A resubmittal is expected by the end of October 2013. The Package A and Package B contractors will complete their Final Design. At present, Fairfax and Loudoun Counties would manage the final design of the parking facilities included in *Parking Garages (formerly Package C)*. MWAA has set a deadline of December 31, 2014 for the counties to confirm that they can deliver the completed parking facilities as required. Loudoun County has issued a solicitation through the Public-Private Transportation Act of 1995 for proposals from qualified private entities for the design, construction, financing, operation and maintenance of up to three parking garages in Loudoun County in conjunction with Phase 2 of the Dulles Corridor Metrorail Project. The pre-proposal conference was held on September 23, 2013 and proposals are due on October 30, 2013.
- **Construction Progress** – MWAA issued a NTP for the Package A Contract on July 8, 2013. The substantial completion date is July 7, 2018.
- **Budget Status** - The Phase 2 Engineer's Estimate was \$3,153,264,289, which included \$157,750,000 in unallocated contingency. This figure is in year-of-expenditure (YOE) dollars and excludes the finance costs. The Phase 2 Project has been broken down into the following elements:
  - Package A – Design and Construction of the Guideway, Track, Stations and Systems
  - Package B – Design and Construction of the Maintenance Facility
  - Package S – Advanced Earthwork at Maintenance Facility
  - Parking Garages (formerly Package C) – Design and Construction of Parking Facilities
  - Owner Costs – Preliminary Engineering, Real Estate, Rail Vehicles, WMATA Costs, Commodity Escalation, Professional Services, and Escalation

Package A firm-fixed price contract was awarded on May 14, 2013 at \$1,177,777,000 which was below the engineer's estimate. As a result, the MWAA adjusted the total Project Capital Cost from \$3,153,264,289 to \$2,902,000,000; however after discussions with the PMOC, MWAA readjusted the total Project Capital Cost to \$3,126,450,757 which included \$146,211,294 for secondary mitigation as noted in their Risk and Contingency Management Plan, Revision 1b.

Primary funding for Phase 2 comes from MWAA (7.45%), Fairfax County (21.66%), Loudoun County (14.68%), Commonwealth of Virginia (10.34%), and the Dulles Toll Road (45.87%). MWAA, Fairfax County, and Loudoun County anticipate receiving a total of \$1.876 billion in direct loans under the United States Department of Transportation (USDOT) Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance program to assist in financing their shares.

- **Risk** – MWAA submitted the Phase 2 Risk and Contingency Management Plan (RCMP) Revision 1 dated April 2013 to FTA for approval. On May 28, 2013, MWAA submitted their draft Standard Cost Category (SCC) Budget Workbook to the PMOC. The PMOC evaluated the Phase 2 budget, including the proposed level of contingency, and conducted a cost review workshop with MWAA on July 9, 2013. Following discussions held during the July 9, 2013 workshop and the August 8, 2013 Monthly Update meeting, regarding the Phase 2 budget, the proposed level of contingency, and the draft risk register, MWAA issued a revised draft RCMP, Revision 1b dated August 2013, for PMOC review on August 30, 2013, adjusting the total project cost to \$3,126,450,757, including base contingency of \$477,143,052 and a secondary cost contingency of \$146,211,294. The PMOC has completed its review of the RCMP and recommended acceptance with comments, to FTA.
- **Rail Car Procurement** - On August 15, 2012, MWAA authorized WMATA to amend their contract with Kawasaki to exercise the option for an additional sixty-four 7000 Series railcars for Phase 2. WMATA's letter of August 30, 2012 to MWAA confirmed the amendment to the Kawasaki Contract for the Phase 2 railcars. The latest schedule from Kawasaki dated July 25, 2013 shows final delivery for the last Phase 2 vehicle no later than August 9, 2017.
- **Personnel** – The *May* 2013 Draft Project Management Plan (PMP) includes a staffing plan showing the gradual transfer of the Phase 1 staff to the Phase 2 project. Currently, Patrick Nowakowski, the MWAA Executive Project Director is dedicated 50 percent to Phase 2 through February 2014; Sam Carnaggio, MWAA Project Director is dedicated 10 percent to Phase 2 through February 2014; Karl Rohrer, MWAA Deputy Project Director is dedicated 100 percent to Phase 2. With the exception of Mr. Rohrer, the key personnel are the same as those working on Phase 1. This transition plan appears to be reasonable, although it may be impacted by any delay in the substantial completion of Phase 1.

## **2. PMOC's Assessment of Project Status**

As a result of the lessons learned and experience gained from the design and construction of the Phase 1 project, MWAA has developed a staffing plan necessary to effectively manage the Phase 2 project. FTA needs to monitor closely the transition of staff from the Phase 1 project to Phase 2 to ensure that there are adequate levels of dedicated and experienced staff on both projects through the completion of Phase 1 and the procurement activities and the start of final engineering of the Phase 2. Additionally, the effective working relationship between MWAA and WMATA during Phase 1 needs to continue for Phase 2.

MWAA incorporated into the Phase 2 project the design changes to enhance the new/improved system requested by WMATA during Phase 1. Hopefully, this will reduce the number of WMATA-requested design changes under Phase 2. Likewise, MWAA implemented lessons learned from the Phase 1 project to mitigate some of the potential risks in the Phase 2 project. Most significant of the lessons learned and implemented in Phase 2 was the elimination of Allowance Items, institution of a cost-loaded schedule requirement and requiring the Design-Build (DB) Contractor to be responsible for utility relocations. These were elements that led to significant cost overruns in Phase 1. However, as the Phase 2 project progresses into bidding and construction, MWAA needs to remain proactive in identifying and mitigating potential risks.

# MAIN REPORT

## 1. Grantee's Capabilities and Approach

### a. Technical Capacity and Capability

Based on lessons learned during the Phase 1 project, Metropolitan Washington Airports Authority (MWAA) is implementing an integrated project management organization consisting of MWAA and Project Management Support Services (PMSS) staff. The Board approved the contract for the PMSS and the contract was executed on July 26, 2013. The first task order was issued to the PMSS, Jacobs Engineering, to provide staffing support for Phase 2. The PMSS provided support for Phase 2 for preliminary engineering under a separate contract that expired on July 26, 2013.

MWAA submitted a draft Project Management Plan (PMP) for Phase 2, Version 1.1, which includes project organization and staffing chart. Because most of the Phase 1 staff will be transitioning to Phase 2, labor distribution charts for each position were also provided to determine levels of staffing by month. The PMP, including the current Phase 2 staffing levels, were reviewed and comments provided to FTA for consideration on August 2, 2013.

MWAA reported that the number of full-time equivalents for Phase 2 during *September 2013* is 259; an increase of 31 from *August 2013*. This is composed as follows: MWAA – 7, Virginia Department of Transportation (VDOT) – 4, Washington Metropolitan Area Transit Authority (WMATA) – 5, Project Management Support Services (PMSS) – 30, and CRC – 213. Of the 213 staff reported by CRC, some are located in the project office; the remainder are located in local design offices in Washington, DC and Virginia.

MWAA negotiated and signed the lease for the Phase 2 project office on June 22, 2013. Renovations are ongoing and MWAA now plans to occupy the Phase 2 project office beginning in November 2013. Relocation to the new Phase 2 office has been delayed due to the fact that Federal regulations require that all contracts for the office build-out be competitively advertised. *MWAA could not use its on-call contractors but had to issue new procurements that included all required federal clauses.* Project staff will move in two phases: November 2013 and January 2014. The address for the Phase 2 project office is 198 Van Buren Street, Herndon, Virginia.

The Package A DB Contractor, Capital Rail Constructors (CRC), and WMATA staff will be co-located with the MWAA project staff. The design team for CRC is located in an adjacent building.

Upon completion of the project, WMATA will become the operator of this extension to the existing Metrorail system. WMATA personnel have been active participants in the Phase 1 project, and the agency will have more staff involved on the Phase 2 project.

### b. Project Controls

MWAA is developing procedures with regard to monitoring and controlling project scope, quality, schedule, cost, contingency management, and safety. MWAA has implemented lessons learned from the Phase 1 project for the Phase 2 contracts. Most significant of the lessons learned and implemented in Phase 2 was the elimination of Allowance Items, requiring the Design-Build (DB) Contractor to implement a cost loaded

schedule and to be responsible for utility relocations. These were elements that led to significant cost overruns in Phase 1. It is the PMOC's observation that MWAA continues to monitor and control the project in accordance with their draft procedures.

### c. Compliance

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

- **DBE Goal** – MWAA has developed a DBE Project Goal of 25% of the federal participation cost for Phase 2, which was reviewed by the Region 3 Civil Rights Officer. FTA provided concurrence dated August 26, 2013 that the project DBE meets the requirements set out in the Department of Transportation DBE regulations. Package A has a contract goal of 14%, the PMSS Contract has a goal of 25%, the Package S Contract has a goal of 25%; the *Package B has a goal of 14%*. Fairfax and Loudoun Counties plan to procure the work in *Parking Garages (formerly Package C)* without the use of Federal assistance; therefore, there is no DBE requirement.

MWAA reported that a kick-off meeting and follow-up meeting were held with CRC regarding their DBE plan for Package A and to discuss procedures for internal DBE reporting. *The details are as follow.*

- *On October 3, 2013, MWAA met with CRC's DBE staff to discuss the DBE plan and DBE policy and procedures.*
  - *On October 8, 2013, MWAA forwarded written comments to CRC's DBE staff outlining additional guidance for the DBE plan.*
  - *On October 9, 2013, MWAA met with CRC's purchasing team and managers to discuss DBE policy and procedures and DBE plan.*
- **Title VI** – FTA stated that Fairfax and Loudoun Counties will have to secure approved Title VI Plans because they will be recipients of TIFIA loan funds for the project. *Loudoun County reported that the FTA has unofficially reviewed its Title VI submittal and has accepted the technical aspects of their Title VI plan. However, Loudoun County reported that the assurances provided by the FTA are not the same as those used by USDOT. Loudoun County has no problem with the content of the assurances provided by the FTA; however, Loudoun's legal representative would like clarification. With the government shutdown, FTA has been unavailable to respond to Loudoun County's request for clarification. The Title VI plan will be submitted in December 2013 to the Loudoun County Board of Supervisors for approval and signature.*

Fairfax County stated that a Title VI Plan was previously submitted but rejected by FTA and questioned whether that plan just needed to be revised and resubmitted. FTA stated that Fairfax County needs to address the comments and resubmit the plan for review. *Fairfax County reported that the draft Title VI plan is due from their consultant on October 18, 2013. Fairfax County expects to take the Title VI plan to a closed session of the Fairfax County Board of Supervisors in November 2013 for their acceptance of the draft plan and then to the December Board meeting for*

*approval. Fairfax County added that it will then take an additional 12 to 18 months to implement the plan.*

- **Labor Agreement** - The counties, along with MWAA, will have to sign a 13(c) agreement with the Department of Labor. FTA will initiate the process.

## **2. Project Scope**

Phase 2 of the Project will provide 11.4 route miles of new track from the interim terminus at Wiehle Avenue Station through Dulles Airport to a terminus in eastern Loudoun County. Phase 2 includes six new stations (Reston Town Center, Herndon, Innovation Center, Dulles Airport, Route 606 and Route 772). Phase 2 also includes a Maintenance Facility (maintenance and storage yard facility) at Dulles Airport, five new parking facilities at *four* stations to provide 8,900 parking spaces, and wayside facilities, including traction power substations, tie-breaker stations, and storm water management ponds, along the alignment.

### **a. National Environmental Policy Act (NEPA)/Environmental Assessment (EA)**

MWAA prepared an Environmental Assessment covering the preliminary engineering design refinements for Phase 2, and issued it for public review on May 10, 2012. The FTA Regional Administrator issued a Finding of No significant Impact (FONSI) on December 17, 2012, that stated there were “no significant environmental or socioeconomic impacts associated with the design refinements for Phase 2 of the Dulles Corridor Metrorail Project.” FTA cautioned that should there be any changes in the location of the parking garages by the counties, or if they need any additional property for the construction of the parking garages, MWAA must notify FTA immediately to determine if the environmental documents would need revisions.

MWAA questioned whether a NEPA review/*re-evaluation* is still required if the garages are being procured with local funds, and questioned whether only local requirements should be required. The PMOC noted, however, that the garages are required by the Record of Decision. FTA is to confirm whether or not, further NEPA review would be required for changes to the garage locations.

### **b. Third Party Agreements**

MWAA reported that there are six Intergovernmental Agreements required for Phase 2: WMATA, the Dulles Greenway, Loudoun County, Fairfax County, Virginia Department of Transportation (VDOT), and the Town of Herndon. *As of October 10, 2013, five of the six Intergovernmental Agreements have been executed. The agreement with VDOT has been completed and is pending execution.* MWAA provided a summary of the status of finalizing the six Intergovernmental Agreements below.

AGREEMENT	STATUS	NOTES
WMATA – New Agreement	Executed on August 7, 2013	<i>Effective date August 7, 2013</i>
VDOT – Amendment of Phase 1 Agreement	<i>Negotiations Completed - Final Terms Agreed.</i>	<i>Signature Pending</i>
Fairfax County – Amendment of Phase 1 Agreement	Executed – May 28, 2013	<i>Effective date May 28, 2013</i>
Loudoun County	Executed – August 7, 2013	<i>Effective date August 7, 2013</i>
Town of Herndon	Executed – July 9, 2013	<i>Effective date July 9, 2013</i>
TRIP II (Dulles Greenway)	<i>Executed – September 30, 2013</i>	<i>Effective date August 1, 2013</i>

**c. Design Status**

Preliminary Engineering is complete for Phase 2. Final design and construction will be performed under the DB *contracts* for Package A as well as for Package B. Fairfax and Loudoun Counties will manage the final design of the parking garages included in *Parking Garages (formerly Package C)*. The Counties have been asked to confirm delivery of those elements as a condition precedent to a TIFIA loan.

**d. Bidding and Construction Status**

- **New Mass Transit Line (Package A)**

In August 2012, MWAA issued a Request for Qualifications solicitation for the DB contract for Package A of the Phase 2 Dulles Corridor Metrorail Project. Five DB teams were shortlisted and a final Request for Proposals issued on February 6, 2013. At the opening of proposals on April 19, 2013, CRC, a joint venture consisting of Clark Construction Group, LLC and Kiewit Infrastructure South Company had the lowest responsible and responsive bid of \$1,177,777,000. On May 14, 2013, MWAA formally awarded the Package A Contract to CRC. NTP was issued on July 8, 2013 with a contractual duration for Package A of 1825 calendar days from NTP. Thus, the Substantial Completion Date for Package A is July 7, 2018.

The DB contractor, CRC, *is in the third month of their contract and is continuing design activities. CRC has begun the submittal of 60 percent design packages for the utilities and early civil work at the Dulles Airport. Ten design submittals have been received by MWAA for review. Weekly design coordination review meetings started on July 31, 2013 are being held to advance the design. Twenty-five to thirty, 60 percent design submittal packages are due in the first six months of the CRC contract. The design of the Project is expected to take eighteen months.*

MWAA received the preliminary design *submittal* on July 23, 2013 *to establish the code year for building code compliance. This preliminary design submittal has gone through the MWAA comment process and will be resubmitted by CRC next week. MWAA will then transmit the submittal to the appropriate municipality building code officials to establish the building code year to be used for the project.*

Geotechnical borings and survey activities *continue throughout the entire Phase 2 corridor, including the Dulles International Airport Access Highway (DIAAH).*

*Surveying and geotechnical work activities are almost complete in the public areas and are moving out into the Dulles Greenway. These activities will be ongoing for the next couple of months and are scheduled to be completed by the end of the year. CRC is in the process of preparing and submitting their initial permit applications for their current and advanced construction activities, and are working on the planning and permitting for their main field office at the Dulles International Airport in one of the parking lots north along Autopilot Drive. In the next two to three weeks, CRC will start moving the trees from the Saarinen Circle median where the first station will be constructed. The trees will be relocated elsewhere at the airport.*

*MWAA accepted CRC's cost-loaded Proposal Schedule for the first six months with a maximum payment of \$50 million, in addition to the cost of bonds, and insurance as a condition of the contract award. In August 2013, CRC resubmitted a revised cost-loaded Proposal Schedule. The revised Proposal Schedule was "Accepted as Noted" by MWAA Letter No. MWAA-P2-01014 dated September 4, 2013, and CRC is currently working and billing to the revised cost-loaded Proposal Schedule until the Baseline Schedule is approved.*

*CRC was forecasting submittal of the Baseline Schedule at the end of September 2013; however, CRC advised MWAA that the baseline schedule would be submitted by November 8, 2013, 120 days from NTP, which is when it is due per contract. MWAA is currently working with CRC on the development of the Baseline Schedule, and MWAA has 60 days to accept the Baseline Schedule after receipt from CRC.*

- **Dulles Maintenance Facility (Package B)**

Package B will include the final design of the Maintenance and Storage Yard. On June 6, 2013, MWAA submitted a cost validation study in response to a request from FTA. This study included updated plans and cost estimates for the redesign of the Dulles Maintenance Facility based on program reductions proposed by WMATA in late 2011. Some of the changes include: reduction in the yard storage track capacity from 250 railcars to an initial storage of 168, with the ability to expand to 228; reduction in the size of the Maintenance of Way and Warehouse buildings; and elimination of the Heavy Damage Building and inspection tracks and associated inspection pits in the Service and Inspection Maintenance Building. MWAA's evaluation shows that the reduced scope saves \$10 million.

*MWAA has received comments from WMATA on the Package B contract documents and is in the process of incorporating those comments in the procurement documents and the statement of work, and finalizing the contract drawings for Package B based on the reduced scope using some of the original plan details and layouts. MWAA stated that there were no major changes as a result of the WMATA review.*

*During the October 10, 2013 meeting, MWAA reported that a procurement method had been determined. MWAA explained that a two-step method similar to the procurement of Package A will be followed wherein MWAA will issue a Request for Qualifications Information (RFQI) and then request technical proposals and price proposals. The differences to Package A will be that instead of issuing a shortlist in response to the RFQI, MWAA will just prequalify potential bidders on a pass/fail basis. MWAA will then issue a Request for Proposal (RFP) to all qualified potential*

*bidders, and hold two to three collaboration meetings with each team to clarify the understanding of the requirements. The technical proposals will be evaluated again on a pass/fail basis, and the cost proposal will be low bid. This process is being presented to the MWAA Board of Directors in October 2013 for concurrence.*

*MWAA sent a letter to WMATA confirming a budget for Package B of \$280 million, and stating what scope will and will not be included in the base contract package. MWAA added that the procurement would include options for the other scope items requested by WMATA but not in the base contract package.*

MWAA anticipates issuing *RFQI* solicitation for the Package B Contract in November 2013, a *RFP* in late January 2014, with final contractor selection in May 2014, contract award in June 2014 and NTP in July 2014. Substantial completion is currently scheduled for June 29, 2018.

- **Advanced Earthwork (Package S)**

The Phase 1 contractor used the site of the proposed Dulles Maintenance Facility to stockpile excavated material. To construct the new facility, it will be necessary to move most of the stockpiled material and re-grade the site. MWAA intends to award an Advanced Earthwork contract to move the stockpile to another site on Dulles Airport property. MWAA reported that the Package S contract documents were revised to ensure that the work for Package S is no longer within the Dulles Airport Air Operations Area. The same coordination procedures used during Phase 1 are already in place with the Dulles Airport staff and notices have been re-issued. The Advanced Earthwork contract will have a separate contractor, scope, DBE goal, and milestones from the Package B contract.

MWAA issued the Advanced Earthwork contract (Package S) solicitation on June 27, 2013 and held the pre-proposal conference on July 12, 2013. Ten bids were received on August 12, 2013 and a Notice of Recommended Award was sent to the lowest responsible bidder the week of August 26, 2013. However, the lowest bidder was found nonresponsive because it failed to demonstrate the required experience for its lead designer. The lowest bidder filed an initial protest that was denied by MWAA. The contractor then filed an appeal with the MWAA Chief Executive Officer (CEO); *the protest was denied by Jack Potter, MWAA CEO, which is the final step in the MWAA appeal process.* The MWAA CEO's decision on the protest is final; there is no appeal to the MWAA Board of Directors because the contract is not subject to Board approval. *The PMOC reminded MWAA that the bidders can pursue their protests with the FTA. MWAA responded that the bidders can ask FTA to review the matter; however, they only have a couple of weeks before the protest period closes. Additionally, FTA has been notified of the protest denials by MWAA.*

*MWAA then contacted the second lowest bidder; however, on October 7, 2013, that bidder was disqualified due to noncompliance with the DBE substitution requirements. The second lowest bidder sent a letter on October 10, 2013 asking for reconsideration, then filed a protest on October 14, 2013, relying on the reasons set forth in the October 10 letter. On October 8, 2013, MWAA issued a Notice of*

*Recommended Award to the third lowest bidder and anticipates having them under contract by the end of October 2013. While the third lowest bidder has been determined responsive, the letters of intent are pending submittal. MWAA will not award the Package S Contract until the protest process is completed.*

*The third lowest responsible bid is still under \$6 million at \$5.9 million, and well under the engineer's estimate of \$18.52 million. All proposals are good until November 12, 2013. MWAA now anticipates a late-October award and NTP in mid-November 2013.*

- ***Parking Garages (formerly Package C)***

At present, Fairfax County and Loudoun County plan to procure the five required parking garages.

Fairfax County is currently responsible for two parking garages: one at the Innovation Center Station and one at the Herndon Station. Fairfax County's existing Task Order Consultant is currently performing work to advance design concepts of both garages and the conceptual designs are currently under development for both stations; however, Fairfax County has not agreed on the final locations. The County's Department of Public Works and Environmental Services is the lead county agency for the design and construction of both parking facilities. Fairfax County anticipates issuing a Design-Bid-Build solicitation through the Public Works and Environmental Services Department for the construction of both of their parking garages. The County plans to design, construct, own, maintain, and operate both parking facilities. The selection of a firm to complete the final design for the parking facilities was expected in late August 2013. However, this has been delayed because the conceptual designs are not yet completed. The question with regard to whether or not a NEPA review is required is also negatively impacting the selection process for the final designs of the garages.

On July 30, 2013, Fairfax County approved a Real Estate Exchange Agreement for the site of the Innovation Center Station. The Agreement provides for the exchange of property and property acquisition necessary to implement a joint development plan. *A joint rezoning application for the Innovation Center garage has been filed with the Fairfax County Planning and Zoning Department, which relocates the garage further to the south. The land use case is currently in process and will not be finalized until April 2014. Until the land use case is approved, Fairfax County will not have the final acceptance to proceed with the relocation of the garage.*

*Fairfax County is also evaluating a concept to move the Herndon garage to the east of the station and the County is in discussions with the adjacent landowner to initiate a land swap to in order to relocate the garage. Fairfax County currently owns the land where the garage is proposed. Fairfax County anticipates resolving all issues with the adjacent landowner, and therefore the final location of the garage, by spring 2014.*

*Fairfax County has authorized approximately \$2.5 million to start design work on both garages, and construction is expected to be completed in April 2018.*

Loudoun County is currently responsible for three parking garages: one at the Route 606 Station and two at the Route 772 Station. On November 16, 2012, Loudoun County issued a Solicitation for Conceptual Proposals through the Public-Private Transportation Act of 1995 for Loudoun County Parking Facilities. The solicitation requested the submittal of conceptual proposals from qualified private entities for the finance, design, development, construction, and operation of the parking facilities for Route 606 and 772 Stations. Following a detailed review of the proposals by Loudoun County staff, an action item was put before the Loudoun County Board of Supervisors requesting their approval to proceed with a Best and Final Offer for the three garages. At its meeting on July 17, 2013, the Board voted to reject the three initial proposals which were received through a Request for Information process. The Board voted instead to solicit new proposals through a Request for Proposals (RFP) process.

*During the October 10, 2013 meeting, Loudoun County affirmed its strong desire to procure the garages outside of the MWAA program and will confirm that response at the December 2013 meeting of the Loudoun Board of Supervisors. Procurement of the garages in Loudoun County is on an accelerated schedule. On September 3, 2013, Loudoun County issued a Request for Proposal for the design, construction, financing, operation and maintenance of the three Phase 2 parking garages. Bidders can propose on one, two or all three sites, and the bidder for the Route 772 North garage will have to provide proof of ownership of the site. Proposals are due on October 30, 2013. After review of the proposals, the highest ranked offeror will be identified in January 2014. Negotiations with the selected offeror are expected to be undertaken in the January through July 2014 timeframe. Loudoun County intends to fully privatize the three parking facilities.*

*Loudoun County advised that the Route 772 South and Route 606 garages will remain in the location identified in preliminary engineering. However, the courts have determined that the proper people that represent the land to be used for the Route 772 North garage did not sign the land use proffers and therefore they are invalid. Loudoun County is considering taking the site by condemnation if there is no action by a future date to be determined.*

**e. Real Estate**

MWAA submitted their Real Estate Acquisition Management Plan (RAMP), Revision 0, for Phase 2 on August 19, 2013. The PMOC is in the process of reviewing the RAMP; however, the appendix listing the Phase 2 properties which was pending, was received by the PMOC via the Property Acquisition List letter dated September 27, 2013 on September 30, 2013. Details of the required properties will be developed during the design phase of the Package A Contract. MWAA has stated their intent, but has not yet submitted a request, to raise the threshold for FTA review of real estate appraisals as they did for Phase 1.

MWAA awarded the contract for a Right-of-Way agent the week of August 26, 2013 and Priority 1 acquisitions are underway. *MWAA is working on the predecessor activities to acquire the Priority 1 parcels. Priority 1 parcels are primarily the wayside facility*

*locations. MWAA is beginning to develop the property appraisals and the right-of-way plans for the Priority 1 acquisitions, which are due to CRC by March 15, 2014.*

*During the October 10, 2013 meeting, MWAA reported that for the last couple of weeks, the archeologists were performing data recovery in the area of the Yard Lead; however, there has not been much data to recover. MWAA added that the archeologist have found debitage (rock flakes remaining from the construction of other artifacts), but little else. Section 106 of the National Historic Preservation Act of 1966 is a two-step process; it includes a management plan and a consultation with the State Historic Preservation Office to determine if further work is needed. MWAA is in the process of completing the management plan; however, at this time all indications are that MWAA will not have to proceed with the consultation as to date nothing worthy has been found from the archeological excavations.*

**f. Utility Coordination**

MWAA submitted their Permit Management Plan, Revision 0, for Phase 2 on August 19, 2013. *The PMOC has completed its review of the Permit Management Plan and provided a draft spot report with recommendations to FTA for review on October 8, 2013. MWAA advised that if the counties build the garages, the counties themselves will be the code officials and not the Department of General Services. Also, the counties will be responsible for compliance with local requirements for storm water design and other design requirements.* The contract with CRC states that all utility relocations associated with Package A are the contractor's responsibility.

**g. Vehicle Procurement**

On August 15, 2012, MWAA authorized WMATA to amend their contract with Kawasaki to exercise the option for an additional sixty-four 7000 Series railcars for Phase 2. WMATA's letter of August 30, 2012 confirmed the executed amendment to the Kawasaki Contract. The MWAA budget including contingency, in year of expenditure dollars, for the Phase 2 railcars is \$213.383 million. The latest schedule from Kawasaki dated July 25, 2013 shows final delivery for the last Phase 2 vehicle no later than August 9, 2017.

The original railcar award included cost escalation factors depending on when the options were exercised. In response to FTA's request, MWAA provided the current railcar budget for Phase 2, including the cost escalation factor based on when the option was exercised to confirm the current Phase 2 railcar budget. MWAA added that it sent an explanation, via email, to FTA regarding some inconsistencies in the information provided.

**3. Project Management Plan and Sub-plans**

MWAA has submitted the PMP and required sub-plans. Below is the status of each plan received by FTA through *September 30, 2013.*

- MWAA submitted that latest version of the draft Phase 2 **Project Management Plan** (PMP), Version 1.1 to FTA on May 16, 2013 for FTA review and approval. Version 1.1 included modifications based on the comments received from FTA to Version 1.0, dated November 2012 submitted to FTA on December 7, 2012. The résumé summaries of key personnel were

received on June 21, 2013. On August 2, 2013, the PMOC recommended that FTA accept the PMP Version 1.1, with comments, and direct MWAA to formally issue the final PMP for this stage of the Phase 2 project for approval.

- MWAA submitted the latest revision of the Phase 2 **Quality Program Plan (QPP)**, Revision 1, to the FTA on March 26, 2013 for FTA review and approval. The QPP incorporates the changes to address the PMOC comments to QPP Revision 0, dated October 24, 2012 submitted to FTA on December 12, 2012. The comments were discussed after the March 7, 2013 FTA/PMOC monthly meeting, and were addressed and closed. The PMOC recommended acceptance, with comments, of the QPP to FTA on May 17, 2013, and on September 23, 2013, FTA approved the Phase 2 QPP, Revision 1, and requested that MWAA update it as needed as Phase 2 continues to move forward through final design and construction. In addition, FTA requested that MWAA submit the Phase 2 Project Management Procedures to FTA and the PMOC for review.
- MWAA submitted the Phase 2 **Safety and Security Management Plan (SSMP)**, Revision Draft dated February 28, 2013, to the FTA on March 27, 2013 for review and approval. On May 17, 2013, the PMOC recommended that the FTA accept the SSMP contingent upon the signature by WMATA's Chief Safety Officer. MWAA addressed the three recommendations included in the PMOC review and the SSMP, Revision 0 dated July 2013 was signed off by WMATA's Chief Safety Officer on August 6, 2013. The PMOC recommended acceptance of the SSMP, Revision 0 to FTA on September 3, 2013.

The Tri-state Oversight Committee (TOC) stated that they are revising the Safety and Security Oversight Management Plan for Phase 2 to clearly outline the lines of authority between the TOC, MWAA and WMATA. On September 4, 2013, a meeting was held between the TOC and MWAA to initiate this process.

- MWAA submitted the latest revision of the Phase 2 **Risk and Contingency Management Plan (RCMP)**, Revision 1, to the FTA on April 24, 2013 for review and approval. Revision 1 included modifications based on the comments received from FTA to Revision 0, Draft 2, dated December 2012. MWAA submitted their draft SCC Budget Workbook to the PMOC on May 28, 2013. MWAA, FTA and the PMOC met on July 9, 2013 to review MWAA's development of project costs. Based on the discussions during the review meetings, MWAA issued a revised RCMP Revision 1a for PMOC review on July 31, 2013.

The July 2013 RCMP included a lower secondary mitigation target than that recommended by the PMOC in the July 9, 2013 meeting based on MWAA's assessment that some of the beta factors assumed by the PMOC could be lowered by this stage of the project. On August 8, 2013, a subsequent meeting was held with MWAA to discuss the development of secondary contingency provided. On August 14, 2013, the PMOC completed a sensitivity analysis of the Modeled Contingency Requirement and concluded that there is still the indication that additional contingency is needed over that currently included in the project budget of \$2,902 million. The PMOC recommended that the project budget should include ample contingency for all project risks and recommended a project budget of \$3,126 million.

Upon further review of the PMOC comments and further consideration of the overall status of the Phase 2 program, MWAA issued a revised draft RCMP, revision 1b, for PMOC review on August 30, 2013, adjusting the total project cost to \$3,126,450,757, including base contingency of \$477,143,052 and a secondary cost contingency of \$146,211,294. The

PMOC has completed its review of the RCMP and on September 3, 2013 recommended acceptance, with comments, to FTA.

- Since WMATA, rather than MWAA, will be the operator of the completed project, the WMATA **Rail Fleet Management Plan** (RFMP) is the applicable document. WMATA submitted RFMP, Revision J, on August 1, 2013 and FTA accepted it on August 8, 2013.

#### 4. Project Schedule

Phase 2 is currently in the procurement phase. Construction is expected to begin in February 2014 with the start of utility relocation and with the commencement of revenue service on January 2, 2019. The table below shows the Phase 2 milestones, as provided by MWAA in the latest schedule dated August 28, 2013 and updated during the *October 10*, 2013 meeting.

<b>DULLES CORRIDOR PHASE 2 MILESTONES</b>	
<b>DESCRIPTION</b>	<b>DATE</b>
Package A Design-Build Contract Award	05/14/2013 (A)
Package S Advanced Earthwork Contract IFB	06/27/2013 (A)
Package A Contract NTP	07/08/2013 (A)
Package S Advanced Earthwork Contract Award	10/30/2013
Package S Advanced Earthwork Contract NTP	11/16/2013
Package B Contract RFQI	11/15/2013
Package B Contract RFP	01/15/2014
Package B Contract Award	05/28/2014
Package B Contract NTP	07/01/2014
Package S Advanced Earthwork Contract Substantial Completion	10/01/2014
Deadline for Fairfax and Loudoun Counties' decision to construct the Parking Facilities	12/31/2014
Construction of Parking Facilities Complete	06/29/2018
Package B Contract Substantial Completion	06/29/2018
Package A Contract Substantial Completion	07/07/2018
Begin Operations Readiness Testing	07/07/2018
Complete Operations Readiness Testing	09/04/2018
Project Final Acceptance	09/04/2018
Begin WMATA Revenue Operations Acceptance Testing	09/05/2018
Complete WMATA Revenue Operations Acceptance Testing	01/02/2019
Revenue Service Date	01/02/2019

##### a. Important Activities – 90-Day Look Ahead

- *MWAA receive and approve of the Package A Baseline Schedule.*
- *MWAA resolve bid protest and issue award and NTP for Advanced Earthwork Contract (Package S).*
- *MWAA issue the RFQI solicitation for Maintenance Facility (Package B).*
- *Loudoun County resolve the landowner dispute on the Route 772 North garage property.*
- *Loudoun County receive and analyze the bids for the design, construction, financing, operation and maintenance of the three Phase 2 parking garages in Loudoun County; issue contract award and NTP.*

- MWAA execute third-party agreement with VDOT.
- Loudoun County Board of Supervisors approve the Title VI plan in December 2013.
- Fairfax County Board of Supervisors approve the Title VI plan in December 2013.
- MWAA complete the management plan in accordance with Section 106 of the National Historic Preservation Act of 1966 for the Yard Lead location.

## 5. Project Cost

MWAA's current Phase 2 project budget is \$3,126,450,757, including the cost of the parking garages to be funded by Fairfax and Loudoun Counties. This figure is in year-of-expenditure dollars and excludes the finance costs. Below is the breakdown of that budget:

PHASE 2 ESTIMATED CAPITAL COSTS (\$MILLIONS)	
SCOPE AND FTA COST CATEGORIES	COST
Guideway and Track Elements	\$ 409
Stations	\$ 261
Support Facilities: Yards, Shops, Admin. Bldgs	\$ 285
Site Work & Utilities	\$ 438
Train Systems	\$ 210
Right-of-Way and Property Acquisition	\$ 64
Railcars and Support Vehicles	\$ 213
Design and Engineering Services	\$ 523
Unallocated Contingency	\$ 376
<b>Baseline Project Cost Estimate</b>	<b>\$ 2,778</b>
County-Funded Elements	\$ 348
<b>TOTAL PROJECT CAPITAL COST</b>	<b>\$ 3,126</b>

Primary funding for Phase 2 comes from MWAA (7.45%), Fairfax County (21.66%), Loudoun County (14.68%), Commonwealth of Virginia (10.34%), and the Dulles Toll Road (45.87%). MWAA, Fairfax County, and Loudoun County anticipate receiving a total of \$1.876 billion in direct loans under the United States Department of Transportation (USDOT) Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance program to assist in financing their shares.

SOURCES OF CAPITAL FUNDING (\$Millions)				
	Multi-funded Elements	County-Funded Elements	Phase 2 Total	% of Total
Commonwealth of Virginia	\$ 323	\$ 0	\$ 323	10.34%
Fairfax County	\$ 515	\$ 162	\$ 677	21.66%
Loudoun County	\$ 273	\$ 186	\$ 459	14.68%
MWAA (Aviation Funds)	\$ 233	\$ 0	\$ 233	7.45%
MWAA (Dulles Toll Road)	\$ 1,434	\$ 0	\$ 1,434	45.87%
<b>Total Sources of Funding</b>	<b>\$ 2,778</b>	<b>\$ 348</b>	<b>\$ 3,126</b>	<b>100.00%</b>

The TIFIA working group continues to meet on a weekly basis. On June 21, 2013, MWAA, and Fairfax and Loudoun Counties presented the financial plans for the project to the USDOT TIFIA

staff and consultants. *All parties within the TIFIA working group are fully engaged in ensuring TIFIA has all due diligence deliverables, and MWAA, Fairfax and Loudoun Counties are actively preparing to submit an application once invited.* Fairfax and Loudoun Counties have agreed to remove the parking garages from the TIFIA loan and construct the garages using funding outside of the TIFIA eligible budget. In exchange for removing the funds from the TIFIA eligible costs, the Counties will agree to deliver the garages without requesting funding from the Phase 2 project budget. This agreement is pending completion. MWAA, Fairfax and Loudoun Counties have each remitted \$233,000 to TIFIA to-date to prefund financial advisory and legal work by the TIFIA office.

*Each loan requestor is fulfilling its requested deliverables to TIFIA's due diligence:*

MWAA: *On April 11, 2013, MWAA provided the financial feasibility study to the TIFIA Joint Program Office. On May 9, 2013, MWAA submitted its initial plan of finance and financial model, and indicative rating to the TIFIA Joint Program Office. MWAA has submitted most of the items required to prove due diligence; however, a couple of the sensitivity tests for the Dulles Toll Road revenues are still pending. MWAA anticipates transmitting that information by October 11, 2013. As of October 17, 2013, MWAA has submitted all of the items requested by TIFIA for due diligence. MWAA hopes to complete the TIFIA loan process by the end of the year.*

Fairfax County: *Fairfax County submitted its initial plan of finance and financial model, indicative rating, and feasibility study to the TIFIA Joint Program Office on June 5, 2013. As of the October 10, 2013, Fairfax County reported that it has submitted everything that has been required by the TIFIA Joint Program Office; however, Fairfax County is working through some issues regarding the conditions for repayment of the loan using the commercial and industrial tax revenues.*

Loudoun County - *Loudoun County submitted its initial plan of finance and financial model, indicative rating, and feasibility study to the TIFIA Joint Program Office on June 14, 2013. Loudoun County reported that they are up to date on all its required submittals, including financial information, to the TIFIA Joint Program Office. The Loudoun County finance department staff has started to review the application in an effort to get a head-start on the application process.*

The SCC Project Cost Summary by SCC Code as provided by MWAA in October 2013:

	SCC Code	SCC Category	YOE Estimate Including Contingency (x\$1,000)
<b>Contract Package A</b>	10	Guideway	\$ 340,953
	20	Stations, Stops, Terminals, Intermodals	\$ 224,433
	30	Support Facilities: Yards, Shops and Admin Bldgs	\$ 377
	40	Sitework and Special Conditions	\$ 352,760
	50	Systems	\$ 172,044
	60	ROW, Land and existing improvements	\$ -
	70	Vehicles	\$ -
	80	Professional services and Agency costs	\$ 87,210
	90	Unallocated Contingency	\$ -
	<b>Package A Total</b>		
<b>Contract Packages B + S</b>	10	Guideway	\$ -
	20	Stations, Stops, Terminals, Intermodals	\$ -
	30	Support Facilities: Yards, Shops and Admin Bldgs	\$ 247,207
	40	Sitework and Special Conditions	\$ 29,513
	50	Systems	\$ -
	60	ROW, Land and existing improvements	\$ -
	70	Vehicles	\$ -
	80	Professional services and Agency costs	\$ 23,280
	90	Unallocated Contingency	\$ -
	<b>Packages B + S Total</b>		
<b>Owner Costs</b>	10	Guideway	\$ 67,552
	20	Stations, Stops, Terminals, Intermodals	\$ 36,299
	30	Support Facilities: Yards, Shops and Admin Bldgs	\$ 36,996
	40	Sitework and Special Conditions	\$ 55,981
	50	Systems	\$ 38,009
	60	ROW, Land and existing improvements	\$ 63,646
	70	Vehicles	\$ 213,383
	80	Professional services and Agency costs	\$ 412,939
	90	Unallocated Contingency	\$ 375,654
	<b>Owner Costs Total</b>		
<b>Packages A + B + S + Owner Costs Total</b>			<b>\$ 2,778,236</b>
<b>Parking Garages</b>	10	Guideway	\$ -
	20	Stations, Stops, Terminals, Intermodals	\$ 227,737
	30	Support Facilities: Yards, Shops and Admin Bldgs	\$ -
	40	Sitework and Special Conditions	\$ 3,957
	50	Systems	\$ 6,823
	60	ROW, Land and existing improvements	\$ 10,825
	70	Vehicles	\$ -
	80	Professional services and Agency costs	\$ 65,794
	90	Unallocated Contingency	\$ 33,079
	<b>Parking Garages Total</b>		
<b>Program Grand Total</b>			<b>\$ 3,126,451</b>

(Cost in the table above are shown in thousands)

On May 14, 2013, MWAA awarded the Package A Contract for final design and construction of the line and stations in the amount of \$1,177,777,000. This was \$307.6 million below the engineer's estimate, which did not take into account the Insurance line item that was deleted from the contract award amount; MWAA will now issue an Owner Controlled Insurance Program (OCIP), estimated to cost \$50 million, and will transfer this item from Package A to the Owner Cost. Thus, the net savings realized is approximately \$258 million.

## 6. Project Risks

MWAA submitted the latest revision of the Phase 2 Risk and Contingency Management Plan (RCMP), Revision 1b, to the FTA on August 30, 2013, including MWAA's proposed Top Ten Risks to FTA for review and approval. MWAA has identified four primary mitigation strategies; however, MWAA and the PMOC agree that the primary and secondary mitigation measures should be developed in more detail following the award of all the DB contracts.

- **Budget Risks:** MWAA has allocated \$623 million in contingency for the overall project. Contingency is further broken down by Package as follows: \$289 million for Package A, \$109 million for Package B, and \$72 million for *Parking Garages (formerly Package C)*. A contingency management plan has been established for the release of contingency based on contract milestones. The Phase 2 budget of \$3,126,450,757 includes a base *cost* contingency of \$477,143,052 and a secondary cost contingency of \$146,211,294.
- **Schedule Risks:** The result from MWAA's schedule risk analysis shows that there is less than 5 percent chance that the Schedule Substantial Completion Date (SSCD) will take place on July 7, 2018. The 80% confidence level date for the SSCD is December 6, 2018, indicating a hypothetical delay of 152 calendar days. The schedule risk analysis performed by the project team was limited to the SSCD. For the Revenue Service Date the project team has accepted the recommendation by PMOC to include a time contingency of 14 months in the overall program schedule. Overall, the schedule contingency including the WMATA testing through the Revenue Service Date is 14 months.
- **Top Ten Risks:** In its August 2013 RCMP, Revision 1b, MWAA provided a summary of the Top Ten Risks for review and approval. Below is the MWAA proposed Top Ten Risks submitted to FTA in the RCMP.

## Summary Status of the Top Ten Project Risks, August 2013 RCMP

RCMP Revision 1b - August 2013			
Risk ID	Event Description	(Proposed Primary) Risk Mitigation	Risk Rating
80.R.1	Project Team and various Agencies add new design requirements not currently included in the PE documents.	Project Team earliest possible exploration and identification of politically based/influenced issues from any and all sources and the timely implementation of a solution that minimizes cost and schedule impact to the Project.	32
40.C.98	Utility Companies involved in the utility relocation delay the DB.	DB to establish agreements with utility companies to start relocations work in advance of construction and complete by earliest need date in DB schedule for timely Project Completion.	27
20.C.103	PE Design for the Dulles Airport Station mezzanine construction on either or both sides of North Garage Walk-back Tunnel proves challenging due to extent of as-built conditions and construction alterations required to the existing tunnel.	DB to undertake early exploration and verification of existing conditions and provide, as required, alternative solutions. Project Team to allow maximum flexibility in design parameters for Dulles Airport Station to encourage DB to achieve optimum final design-construction solutions to lower cost & simplify construction and accommodate patron interface.	27
80.D.70	Loudoun and Fairfax Counties interfering with the design process of the parking garages and do not complete design documents in a timely manner.	Project Team to coordinate with Loudoun and Fairfax Counties to ensure timely issuance of DB packages for Garages and completion of designs.	27
20.R.124	Fairfax and Loudoun Counties, when assigned responsibility, do not complete procurement and construction of parking facilities in timely manner.	Project Team to develop a plan as to how it would build parking facilities in the event of failure by either Fairfax or Loudoun County, and identify and allocate funding sources, enforce deadlines for timely decisions and actions by Fairfax and Loudoun Counties.	27
80.D.39	Fairfax and Loudoun Counties, VDOT, Reston and Town of Herndon require local roadway improvements & traffic signal integration not currently planned or represented in the PE design.	DB to undertake early coordination with the Project Team, Loudoun and Fairfax Counties, Reston and Town of Herndon, VDOT and the owners/developers of congruous and adjacent real property..	24
80.D.43	Initial PE design addressing issues of real property acquisition is incomplete, vague or ambiguous.	Project Team to perform advance supplemental analysis of PE design and real estate requirements; Project Team include pessimistic availability dates in DB Contract Documents.	24
40.R.96	VDOT, Loudoun County, Fairfax County, Reston, and/or Town of Herndon do not provide new roadways or alteration connecting existing roadways to Project station and parking facility access points.	The Project Team is to coordinate and clarify the responsibilities and obligations of Loudoun and Fairfax Counties, the Town of Herndon, Reston, and VDOT, in the IGA and engage the above named counties and local authorities to solidify buy-in from owners and developers of contiguous and adjacent properties for completing access roadways availability to meet the DB schedule for Project Completion.	21
80.C.193	DB does not issue complete and coordinated documents for use in design, construction and the permitting process.	The Project Team is to coordinate the clear articulation in the DB RFP documents the expectations for DB early establishment of submissions procedures and compliance therewith during design and construction, to include establishment of interim milestones during the design phase that are enforceable. Furthermore, the Project Team has to ensure that the DB Contract Documents clearly articulate the DB responsibilities and obligations to provide full and complete submissions to include the work scope of all disciplines required to complete construction and that submittals are staggered to prevent overloading of the review systems.	18
60.R.22	Project Team or DB does not make timely acquisition of right-of-way permanent and temporary easements.	The Project Team shall coordinate the early acquisition of right-of-way and easements so as to not impact the DB design and construction process and progress.	18

## 7. Action Items

### MWAA – DULLES CORRIDOR METRORAIL PROJECT PHASE 2- Items for Grantee Action

PR	ITEM	IDENTIFICATION	NATURE of PROBLEM	D	A	I	COMMENTS	STATUS
1	2A	MWAA needs to submit an updated RCMP	The RCMP must take into account the PMOC recommended contingency levels for each contract package	Y	Y	N	MWAA submitted RCMP, revision 1b on August 30, 2013. The PMOC has completed its review of the RCMP and recommended acceptance, with comments, to FTA.	C
2	2B	MWAA needs to address questions raised by FTA Civil Rights Division regard the overall DBE project goal for Phase 2.	FTA Civil Rights Division questioned part of the methodology used in developing the goal, MWAA must address the questions.	Y	Y	Y	MWAA has developed a DBE Project Goal of 25% of the federal participation cost for Phase 2, which was reviewed by the Region 3 Civil Rights Officer. On August 26, 2013, FTA provided concurrence that the project DBE meets the requirements set out in the Department of Transportation DBE regulations.	C
1	2A	Fairfax and Loudoun need to submit Title VI Plan for FTA review and approval.	Any project receiving federal funds needs to submit a Title VI Plan for review and approval by FTA.	Y	N	N	Loudoun County submitted its Title VI Plan to FTA and received some comments for review and response. Fairfax County has hired a consultant to develop its Title VI Plan and anticipate a draft from the consultant by <i>October 18, 2013</i> .	R
2	2B	MWAA to confirm and provide railcar budget with cost escalation factors based on when the railcar option was exercised.	The current railcar budget for Phase 2 is needed to confirm that the current Phase 2 railcar budget is sufficient.	Y	Y	Y	On August 22, 2013, MWAA provided FTA with the current railcar budget for Phase 2, including the cost escalation factor based on when the option was exercised to confirm the current Phase 2 railcar budget.	C
3	2B	MWAA to provide the execution dates for the Agreements with the Partners.		Y	Y	Y	Execution dates provided by MWAA via email on September 17, 2013.	C
3	2B	FTA to approve MWAA management plans	<i>MWAA submitted the PMP, QPP, SSMP, RCMP, Permit Management Plan and RAMP.</i>	Y	N	N	<i>FTA approved QPP on September 23, 2013. PMOC recommended acceptance with comments of the PMP, QPP, SSMP, RCMP and Permit Management Plan to FTA. FTA to provide response to MWAA.</i>	R

PR	ITEM	IDENTIFICATION	NATURE of PROBLEM	D	A	I	COMMENTS	STATUS
1	2B	FTA to confirm whether further NEPA review will be required for changes to the Loudoun and Fairfax garage locations.	The garages being procured by Loudoun and Fairfax Counties are being procured with local funds only.	N	N	N		R

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

Subtask 2A CLIN 0002A – PMP Review  
Subtask 2B 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

# APPENDICES

## APPENDIX A – LIST OF ACRONYMS

<i>AHJ</i>	<i>Authority Having Jurisdiction</i>
Board	MWAA Board of Directors
CRC	Capital Rail Constructors
DB	Design-Build
DBE	Disadvantaged Business Enterprise
DIAAH	Dulles International Airport Access Highway
EA	Environmental Assessment
FONSI	Finding of No Significant Impact
FTA	Federal Transit Administration
LPA	Locally Preferred Alternative
MWAA	Metropolitan Washington Airports Authority
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
OCIP	Owner Controlled Insurance Program
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
RFMP	Rail Fleet Management Plan
RFQI	Request for Qualifications Information
RFP	Request for Proposal
SCC	Standard Cost Category
SSCD	Schedule Substantial Completion Date
SSMP	Safety and Security Management Plan
TBD	To Be Determined
TOC	Tri-state Oversight Committee
TIFIA	Transportation Infrastructure Finance and Innovation Act
USDOT	United States Department of Transportation
VDOT	Virginia Department of Transportation
WFC	West Falls Church
WMATA	Washington Metropolitan Area Transit Authority

# APPENDIX B – PROJECT MAP





