

COMPREHENSIVE MONTHLY REPORT

November 2013

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

Metropolitan Washington Airports Authority
Washington, DC

January 6, 2014

PMOC Contract Number: DTFT60-09-D-00016

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

OPs Referenced: 01, 25

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Length of Time PMOC Assigned to Project: 0.5years

Length of Time PMOC Lead Assigned to Project: 0.5 years

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EXECUTIVE SUMMARY

The Project Management Oversight Contractor (PMOC) met with Metropolitan Washington Airports Authority (MWAA) on *December 5, 2013* to conduct the monthly progress meeting for work performed in *November 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, wayside facilities (including traction power substations, tie-breaker stations, and storm water management ponds along the alignment), five new parking facilities with a total of 8,900 parking spaces, and sixty-four new 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 *December 5, 2013* to conduct the Phase 2 monthly progress review meeting. The information provided is as of *November 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 Facilities (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. Likewise, MWAA awarded the contract for Package S on November 1, 2013 and issued the NTP on November 18, 2013.

MWAA issued a Request for Qualification Information (RFQI) solicitation for the Package B Contract on November 12, 2013 and the Pre-Submittal Conference is *held on* December 4, 2013. The due date for qualifications submittals is December 20, 2013, with contract award and Notice-to-Proceed taking place in late summer 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 Facilities (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 December 5, 2013, all of the six Intergovernmental Agreements have been executed.*
- **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 was reviewed by the PMOC and comments were provided to FTA on November 13, 2013. *FTA will issue one response to MWAA for both the RAMP and the Permit Management Plan.*

MWAA reported that real estate acquisition for the Phase 2 project is directly under MWAA, unlike Phase 1 where real estate acquisition was the responsibility of the Design-Build (DB) Contractor. Capital Rail Constructors (CRC), the Package A contractor, is only responsible for utility relocation and real estate acquisition outside of the project limits as defined during Preliminary Engineering. MWAA awarded a contract for Appraisal Review Services on October 10, 2013.

- **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. FTA will issue one response to MWAA for both the RAMP and the Permit Management Plan.
- **Design Progress** – MWAA reported that the Preliminary Design submittal for Package A of the Phase 2 Project *was returned to CRC for revision. CRC needs to perform additional*

Fire, Life, Safety analysis before the submittal can be transmitted to the respective Authority Having Jurisdiction (AHJ) - the Department of General Services and the Airports Authority Building Code Department - for approval. At present, Fairfax and Loudoun Counties would manage the final design of the parking facilities included in Parking Facilities (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 facilities 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 four proposals for each parking facility were received on October 30, 2013. Proposals are currently under review by Loudoun County. Package S, the advanced earthwork contract to clear the on-airport site for the Package B rail yard, was awarded in November, and design is proceeding.

- **Construction Progress** – MWAA issued a NTP for the Package A Contract on July 8, 2013. The substantial completion date is July 7, 2018. MWAA *also issued* a NTP for Package S on November 18, 2013, and the substantial completion date would be *December 8, 2014*.
- **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 excluded the finance costs. After the Package A firm-fixed price contract was awarded on May 14, 2013 at a cost below the engineer's estimate, MWAA adjusted the total Project Capital Cost from \$3,153,264,289 to \$2,902,000,000; however during the finalization of the Risk and Contingency Management Plan, MWAA modified the total Project Capital Cost to \$3,126,450,757 to account for secondary mitigation.

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. *On November 12, 2013, MWAA resubmitted RCMP, revision 1b based on comments received from FTA. PMOC recommended acceptance of this document to FTA on November 27, 2013.*
- **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.

In mid-November 2013, MWAA moved approximately 60 Phase 2 staff into the Phase 2 project office located at 198 Van Buren Street, Herndon, Virginia. MWAA plans to move the remaining project staff in mid-January 2014, which is prior to the expiration of the lease for the Phase 1 project office.

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 DB Contractor to be responsible for utility relocations. These were elements that led to significant cost overruns in Phase 1. 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 returned to MWAA for issuance of the final PMP on November 3, 2013.

MWAA reported that the number of full-time equivalents for Phase 2 during *November 2013* is 298; an increase of 3 from *October 2013*. This is composed as follows: MWAA – 8, Virginia Department of Transportation (VDOT) – 6, Washington Metropolitan Area Transit Authority (WMATA) – 29, Project Management Support Services (PMSS) – 37, and CRC – 218. Of the 218 staff reported by CRC, some are located in the project office; the remainder is located in local design offices in Washington, DC and Virginia. MWAA estimates that 175 of the CRC staff is design staff, 30 are project management staff and 15 are field personnel.

Staffing counts for Package S were not provided for this report, but will be included in future reports.

MWAA negotiated and signed the lease for the Phase 2 project office on June 22, 2013. *In mid-November 2013, MWAA moved approximately 60 Phase 2 staff into the Phase 2 project office located at 198 Van Buren Street, Herndon, Virginia. Some of the Phase 2 meetings are now being held at the Phase 2 project office. MWAA plans to move the remaining project staff in mid-January 2014, which is prior to the expiration of the lease for the Phase 1 project office.*

The Package A Design-Build (DB) Contractor, Capital Rail Constructors (CRC), and WMATA staff are 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 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.

MWAA has adopted an electronic document control system, Autodesk Constructware, for Phase 2. All submittals and correspondence are input into the system and made available for any staff member needing access to the documentation. As a part of the electronic document control process, MWAA is using Latista (a separate software application) to post and process review comments electronically. Reviewers can put their comments into the Latista system and the comments work their way back to CRC and a record of the communication is retained. MWAA is targeting all electronic distribution of plans, but is not quite there yet; hard copies are still being sent to some of the reviewers.

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 Facilities (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 Title VI Plan will be combined with the Board action to assume responsibility for the parking facilities. Both actions are now scheduled to go before the Loudoun County Board of Supervisors for approval and signature in January 15, 2014. The revised January date allows staff to provide more substantive technical and financial information received from offerors pursuing

privatization of the parking facilities. Loudoun County reported that the technical aspects of the Title VI Plan have been assembled, reviewed by Loudoun County staff, and submitted to Mr. Reese, FTA Region 3, for review. Loudoun County still has the question regarding the assurances and certifications to be included in the Title VI Plan. Loudoun County added that Mr. Reese did provide a copy of all assurances and certifications; however, Mr. Reese needs to confirm which assurances and certifications need to be included in the Title VI Plan.

FTA questioned whether Loudoun County needed only the assurances and certifications pertaining to Civil Rights, or all FTA required assurances and certification. Loudoun County questioned whether all assurances and certifications are to be included in the Title VI Plan or only the ones pertaining to Civil Rights. FTA stated for all assurances and certifications, Loudoun County should contact J. Fox, FTA Region 3 Legal Counsel; however, Mr. Reese can confirm if only assurances and certifications pertaining to Civil Rights should be included in the Title VI Plan.

Fairfax County reported that a technical memorandum to implement a Title VI program was received from their consultant on November 1, 2013, and Fairfax County staff briefed the Fairfax County Board of Supervisors in closed session on November 19, 2013. Fairfax County submitted the technical memorandum to Mr. Reese, FTA on Region III, on December 3, 2013 and a follow-up conference call is planned on December 13, 2013. Fairfax County expects to take the Title VI program to the Fairfax County Board of Supervisors on January 25, 2014 for formal Board adoption. Fairfax County is still working on some of the interim steps required by FTA, and anticipates 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.
- **Community Outreach** – MWAA provided its Phase 2 media and outreach calendar for November 2013 and a December 2013 look-ahead calendar for community outreach. MWAA is finalizing the alert format and starting a more formalized rollout to the Dulles Airport tenants. CRC has also expanded their community outreach team and is providing updates on upcoming work.

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, wayside facilities, including traction power substations, tie-breaker stations, and storm water management ponds, along the alignment, five new parking facilities at four stations to provide 8,900 parking spaces, and sixty-four new rail cars.

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 facilities by the counties, or if they need any additional property for the construction of the parking facilities, 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 parking facilities are being procured with local funds, and questioned whether only local requirements should be required. FTA stated that the requirement for a NEPA review/re-evaluation will depend on the location of the parking facilities.

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 *December 5, 2013*, all of the six Intergovernmental Agreements have been executed.

MWAA anticipates having an executed funding agreement in February 2014 for the intersection improvements and added turn lane required in Package B which was incorporated into the VDOT Route 606 widening project. The advertisement for the Route 606 project is scheduled for December 2013.

MWAA provided a summary of the status of finalizing agreements below.

AGREEMENT	STATUS	NOTES
WMATA – New Agreement	Executed on August 7, 2013	Effective date August 7, 2013
VDOT – Amendment of Phase 1 Agreement	<i>Executed on November 4, 2013</i>	<i>Effective date November 4, 2013</i>
Fairfax County – Amendment of Phase 1 Agreement	Executed – May 28, 2013	Effective date May 28, 2013
Loudoun County	Executed – August 7, 2013	Effective date August 7, 2013
Town of Herndon	Executed – July 9, 2013	Effective date July 9, 2013
TRIP II (Dulles Greenway)	Executed – September 30, 2013	Effective date August 1, 2013
Funding Agreement with VDOT for Route 606 improvements	<i>The agreement has been drafted and will be sent to VDOT for review.</i>	Anticipated to be executed in February 2014

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 facilities included in Parking Facilities (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 (RFP) 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 *fifth* month of their contract and is continuing design activities. CRC has submitted 20 of the 43 sixty percent design packages. MWAA has completed review of 17 packages and *three* are under review. *Of the 17 packages for which reviews have been completed, two need to be revised and resubmitted; one is for the Innovation Center Station and the other for the Dulles Airport Station. The Innovation Center Station will be the template for the submittal of the other Phase 2 stations and the Dulles Airport Station has some unique design challenges.* The systems design packages will be the last to be submitted. Weekly design coordination review meetings, which started on July 31, 2013, are being held to advance the design. *MWAA and CRC meet on Wednesdays and Thursdays to review the designs, review comments provided, or discuss upcoming submittals.* All 43 sixty percent design submittal packages are scheduled to be submitted through the remainder of this year and early next year. The design of the Project is expected to take eighteen months.

During November 2013, CRC started to submit ninety percent design packages; all for utilities. CRC has submitted four of the 43 ninety percent design packages and all four are under review.

MWAA received the preliminary design submittal to establish the code year for building code compliance on July 23, 2013. *MWAA reported that the resubmittal of the preliminary design submittal was returned to CRC for revision. CRC needs to perform additional Fire, Life, Safety analyses before the submittal can be transmitted to the respective Authority Having Jurisdiction - the Department of General Services and the Airports Authority Building Code Department - to establish the building code year to be used for the project.*

CRC has implemented a design management plan and has scoped out what will be included in every package and the interfaces between the packages. As part of the design process for Phase 2, there are a series of meetings leading up to the approval of a design package. First, a kick-off meeting is held between MWAA and CRC to discuss what CRC has proposed for the scope of the design package, whether MWAA thinks the scope proposed is appropriate, and whether additional scope needs to be added to the design submittal. About two weeks prior to the submittal of the design package, a Pre-Submittal meeting is held where CRC reviews what will be in the design package submittal. Once the design package is submitted and reviewed by

MWAA, a comment resolution meeting is held. At the end of the process there is a record of design review. Integration between the design disciplines occurs at these meetings.

Geotechnical borings and survey activities continue throughout the entire Phase 2 corridor, including the Dulles International Airport Access Highway (DIAAH). Survey activities are approximately 80 percent complete; *final survey and aerial survey activities are approximately 50 percent complete.* Geotechnical survey is also continuing and is approximately 50 percent complete. *Through November 2013, 550 of 1100 geotechnical boring have been completed.* The focus is currently on the wayside facility areas; however, work has been performed in the median of the DIAAH, at the Dulles Airport and out into the Dulles Greenway. Work in the area of the yard lead is scheduled to start shortly.

All permit applications are in place for ongoing activities. CRC is in the process of preparing and submitting permit applications from VDOT and TRIP II for the Dulles Greenway associated with the early field activities. CRC is also in the process of completing the permit *for MWAA approval*, for their main field office at the Dulles Airport in one of the parking lots north along Autopilot Drive, *and for moving some trees on the Dulles Airport property.* The application was submitted and reviewed by MWAA, but CRC needs to supplement it. *MWAA has also requested that CRC comply with the latest stormwater regulations. As a result, a series of meetings with the Department of Environmental Equality are being held to ensure that when CRC does apply for its permit, the process goes smoothly. CRC continues to meet with the various permitting agencies as necessary.*

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.

The Baseline Schedule was to be submitted by CRC on November 5, 2013, 120 days from NTP, per contract. CRC did not meet this contract milestone on time and MWAA requested the immediate submission of the first draft of the Baseline Schedule via Letter No. MWAA-P2-01115 dated November 8, 2013. *CRC formally submitted the Baseline Schedule on November 26, 2013 and it is under review by MWAA. The Baseline Schedule is cost loaded and includes about 12000 activities. A meeting is scheduled on December 5, 2013 with CRC to review the Baseline Schedule and additional review meetings are scheduled for next week. MWAA has 60 days to accept the Baseline Schedule after receipt from CRC. The PMOC requested a copy of the final Baseline Schedule once approved.*

- **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 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. The contract drawings have gone through one cycle of reviews by MWAA and the second cycle of reviews which will include the specifications and the statement of work in December 2013.

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. *The RFQI provides the minimum requirements for qualification.* MWAA will then issue a RFP package 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 *price* proposal will be low bid. This process was presented to the MWAA Board of Directors in October 2013 for concurrence and the MWAA Board of Directors did concur with MWAA's approach.

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 issued the RFQI solicitation for the Package B Contract on November 12, 2013, and qualification *statements* are due on December 20, 2013. *A Pre-Submittal Conference was held on December 4, 2013 and MWAA reported that turnout was good. There was also a DBE exhibit/fair at the Pre-Submittal Conference at which MWAA encouraged prime contractors to set-up tables to meet potential DBE contractors. Approximately four to five teams were represented.*

Issuance of the RFP is anticipated 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.

MWAA reported that VDOT is widening Route 606 along the yard site under an on-going improvement project. After discussing the coordination of intersection improvements and an added turn lane required in Package B, MWAA and VDOT agreed to incorporate this work into the Route 606 widening project and MWAA will fund that portion of the work. This work has been included in the VDOT procurement package. MWAA and VDOT are working on a funding agreement, and

anticipate executing an agreement in February 2014. The advertisement for the Route 606 project is scheduled for December 2013.

- **Advanced Earthwork for Maintenance Facility (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 has exhausted the protest process and did not forward the appeal to FTA. 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. The second lowest bidder has since dropped their protest.

On October 8, 2013, MWAA issued a Notice of Recommended Award to the third lowest bidder and the contract was awarded to Atlantic Construction and Paving on November 1, 2013. Atlantic Construction and Paving has previously performed work for MWAA. The third lowest responsible bid was \$5.950 million, well under the engineer's estimate of \$18.52 million. NTP was issued on November 18, 2013 with a contractual duration for Package S of 385 calendar days from NTP. Thus, the Substantial Completion Date for Package S is December 8, 2014.

MWAA reported that Atlantic Construction and Paving is performing initial field survey work; has completed their assessment of the wetland delineation; is finalizing their design concept; and is preparing their permit application. MWAA has scheduled a start-up meeting with Atlantic Construction and Paving on December 6, 2013 to review their execution plans and to review their detailed project schedule.

MWAA provided the following general overview of the Package S project schedule:

- *December 2013 – February 2014: Complete design and permit applications.*
- *March – April 2014: Complete storm water, Erosion and Sedimentation control, and any haul road construction.*

- *April – October 2014: Hauling work will commence in April 2014, and the site needs to be clear in October 2014.*

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

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

Fairfax County is currently responsible for two parking facilities: one at the Innovation Center Station and one at the Herndon Station. *At the December 5, 2013 meeting, Fairfax County reported that it has hired all the consultants for both the Innovation Center and Herndon parking facilities; consultants include architectural, parking, engineering and traffic consultants.* Both the Innovation Center and Herndon parking facilities are in the conceptual design phase, and Fairfax County is reviewing locations options submitted by the design consultant. Both parking facilities will be at schematic design by February 2014.

The final locations for the parking facilities have not been determined. The Innovation Center parking facility is a land use case and the County is still working on the joint rezoning application which was filed with the Fairfax County Planning and Zoning Department. At Herndon, Fairfax County is looking to shift the location of the parking facility from what is shown in the preliminary engineering plan, from the west to east of the existing parking facility. Any NEPA issues will be resolved once the final locations of the parking facilities are determined.

The County's Department of Public Works and Environmental Services is the lead county agency for the design and construction of both parking facilities, and will be responsible for the project management and oversight of both projects. 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 facilities. 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 parking facilities.

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. 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 parking facility.

Fairfax County is also evaluating a concept to move the Herndon parking facility 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 parking facility. Fairfax County currently owns the land where the parking facility is proposed. Fairfax County anticipates resolving all issues with the adjacent landowner, and therefore the final location of the parking facility, by spring 2014.

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

Loudoun County is currently responsible for three parking facilities: 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 parking facilities. 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 RFP process.

Loudoun County has affirmed its strong desire to procure the parking facilities outside of the MWAA program and will confirm that response at the January 2014 meeting of the Loudoun Board of Supervisors. Procurement of the parking facilities in Loudoun County is on an accelerated schedule. On September 3, 2013, Loudoun County issued a RFP for the design, construction, financing, operation and maintenance of the three Phase 2 parking facilities. Bidders could propose on one, two or all three sites, and the bidder for the Route 772 North parking facility will have to provide proof of ownership of the site. During the November 6, 2013 meeting, it was reported that Loudoun County received four proposals for the privatization of each of the three parking facilities on October 30, 2013. *Loudoun County has reviewed the proposals and one of the teams was deemed nonresponsive at the Route 772 North parking facility because the offeror did not provide legal ownership of the property or the ability to own the property which was a required condition of RFP. Loudoun County has an internal procurement team that is reviewing and scoring the proposals received. The procurement team is being led by Jones Lang LaSalle, due to the financial component of the proposal, and both MWAA and WMATA will be formally asked to join the team as technical members.*

As early as the week of December 9, 2013, Loudoun County plans to call in each of the teams for preliminary questions and answers for clarification of their proposals. The RFP required that offerors adhere to the preliminary engineering location of each of the facilities; all did with the exception of one team that is proposing that the Route 772 North site be moved to a site that they own within walking distance of the station area. Loudoun is looking at what kind of impacts, (time delay, penalties, etc.) will be incurred due to a change in the site location.

After review of the proposals, the highest ranked offeror will be identified *and Loudoun expects an award to be issued by June 2014 after which negotiations will begin.* Loudoun County intends to fully privatize the three parking facilities.

Loudoun County advised that the Route 772 South and Route 606 parking facilities will remain in the location identified in preliminary engineering. Two proposals from private developers were received to finance, design, build, operate and maintain the

Route 772 North parking facility. The parking facility site contained in the Preliminary Engineering is proposed by one offeror. The second offeror is proposing a site in relatively close proximity to the Preliminary Engineering site. This site is owned by the second offeror. The evaluation of these proposals will take place during the coming months.

e. Real Estate

MWAA submitted their Real Estate Acquisition Management Plan (RAMP), Revision 0, for Phase 2 on August 19, 2013. The PMOC requested the appendix listing the Phase 2 properties which 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. The PMOC has reviewed the RAMP and provided comments to FTA on November 13, 2013. FTA stated that one approval letter will be issued to MWAA for both the RAMP and the Permit Management Plan. *The teleconference to discuss the changes from the Phase 1 RAMP was held on November 15, 2013 and MWAA was to have the responses within a week.*

MWAA reported that the letter submitted to FTA in 2007 requested to raise the threshold values to \$250,000 and \$1,000,000 respectively for the entire 23-mile corridor and not specifically Phase 1. In addition, the response received from FTA on October 5, 2007, did not preclude the 11.4 miles of Phase 2 nor did it specify the 11.7 miles in Phase 1. As a result, MWAA determined that the threshold increase applied to the entire corridor. *FTA has discussed the issue with FTA Headquarters and Region 3, and FTA would like to go back to the original request letter from 2007, to confirm that it did not preclude Phase 2. MWAA will provide the original letter to FTA.*

Responsibility for Phase 2 right-of-way will be directly under MWAA and not under the DB Contractor as in Phase 1. The exception to this is CRC is responsible for utility relocation and property acquisitions outside of the parcels that MWAA has identified as part of the project itself. In conjunction with CRC, MWAA has identified the project parcels and broken them into priorities (1, 2, and 3) under the contract.

Priority 1 parcels are primarily the wayside facility locations. MWAA is in the process of verifying the locations for the Priority 1 ancillary facilities and storm water ponds. 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 the end of March 2014.

An RFP for Phase 2 appraisal review services was issued on June 7, 2013 and an award issued to Appraisal Review Specialists, LLC, on October 10, 2013 for a not-to-exceed cost of \$47,000. The majority of the Priority 1 appraisals has been completed and is with the review appraiser. MWAA added that the PMSS team will be the negotiator and relocation manager for the Priority 1 parcels. Because some of the properties are at the airport, MWAA is dealing with lease-holds as opposed to the acquisitions of the parcels.

MWAA has also retained a property acquisition consultant for the remainder for the parcels (Priority 2 and 3) using VDOT's specifications. A kickoff meeting was held on November 8, 2013.

During the December 5, 2013 meeting, MWAA reported that the archeological investigation is anticipated to be completed by December 15, 2013. *Nothing of*

significance has been found. It is MWAA's understanding that it has concurrence from State Historic Preservation Office (SHPO) to not perform the last step of the investigation which was to be mechanical exploration since nothing of significance has been found. SHPO will probably request a letter from MWAA stating that the activity in that western area of the Yard Lead is subject to no further evaluation because it is wetland and no structures or track will be built in that area.

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. *A draft Spot Report was transmitted to MWAA for review on December 9, 2013.* MWAA advised that if the counties build the parking facilities, 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. FTA stated that one letter will be issued to MWAA for both the RAMP and the Permit Management Plan.

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 *November 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 on November 3, 2013 FTA directed MWAA to address the comments provided and formally issue the final PMP for this stage of the Phase 2 project for approval.

MWAA added that the new policy on directive letters needs to be added into the PMP based on the comment received from FTA during the Procurement Services Review.

- 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 responded that they are working on getting the procedures updated and finalized for submittal.
- 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 FTA letter accepting the SSMP was forwarded to MWAA on November 15, 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.

- 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. *On November 12, 2013, MWAA resubmitted RCMP, Revision 1b based on comments received from FTA. On November 27, 2013, PMOC recommended acceptance 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 *December 5, 2013* meeting.

DULLES CORRIDOR PHASE 2 MILESTONES	
DESCRIPTION	DATE
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	11/01/2013 (A)
Package S Advanced Earthwork Contract NTP	11/18/2013 (A)
Package B Contract RFQI	11/12/2013 (A)
Package B Contract RFP	01/27/2014
Package B Contract Award	June 2014
Package B Contract NTP	July 2014
Package S Advanced Earthwork Contract Substantial Completion	12/08/2014
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 approve of the Package A Baseline Schedule.
- *MWAA issue the RFP for Package B, Dulles Maintenance Facility.*
- Loudoun County resolves the landowner dispute on the Route 772 North parking facility property.
- Loudoun County receives and analyzes the bids for the design, construction, financing, operation and maintenance of the three Phase 2 parking facilities in Loudoun County; issue contract award and NTP.

- MWAA execute funding agreement with VDOT for Route 606 widening project.
- Loudoun County Board of Supervisors approves the Title VI plan in January 2014.
- Fairfax County Board of Supervisors approves the Title VI plan in January 2014.
- Loudoun County Board of Directors action to assume responsibility for the parking facilities in January 2014.
- MWAA completion of the archaeological data recovery 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 facilities 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
Baseline Project Cost Estimate	\$ 2,778
County-Funded Elements	\$ 348
TOTAL PROJECT CAPITAL COST	\$ 3,126

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	Percentage 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%
Total Sources of Funding	\$ 2,778	\$ 348	\$ 3,126	100.00%

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 facilities from the TIFIA loan and construct the parking facilities 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 parking facilities 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. As of October 17, 2013, MWAA has submitted all of the items requested by TIFIA for due diligence. *A teleconference was held on December 5, 2013 to respond to any follow-up questions from the TIFIA Joint Program Office.*

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 *for due diligence*; 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 *for due diligence*, 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. *Loudoun County added that it had gone to the bond market for another project and the bond agencies have given Loudoun County AAA rating.*

FTA advised that they are waiting for guidance from FTA Headquarters on how FTA will manage TIFIA funded projects.

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

	SCC Code	SCC Category	YOE Estimate Including Contingency (x\$1,000)
Contract Package A	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	\$ -
		Package A Total	\$ 1,177,777
Contract Packages B + S	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	\$ -
		Packages B + S Total	\$ 300,000
Owner Costs	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
		Owner Costs Total	\$ 1,300,459
		Package A + B + S + Owner Costs Total	\$ 2,778,236
Parking Facilities	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
		Parking Facilities Total	\$ 348,215
		Program Grand Total	\$ 3,126,451

(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.

The PMOC requested an update be provided at the monthly meetings on the status of the project budget, including the status of expenditures and contingency drawdown. At the December 5, 2013 meeting MWAA reported that two directive letters have been issued and per the new policy, a fixed price change order will be issued within 60 days.

FTA added that as a result of the Office of the Inspector General audit on Phase 1, MWAA has taken steps to better manage the accounting for Phase 2. FTA is currently planning to perform a Financial Management Oversight review in September 2014, which would review the implementation of the accounting approach for Phase 2. MWAA responded that September 2014 may be a little aggressive as the TIFIA loan is yet to be executed and there may not be any withdrawals/draw-downs by that date.

6. Project Risks

MWAA submitted the latest revision of the Phase 2 Risk and Contingency Management Plan (RCMP), Revision 1b, to the FTA on November 12, 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 Facilities (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 five percent chance that the Schedule Substantial Completion Date (SSCD) will take place on July 7, 2018. The 80 percent 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, *November 2013 RCMP*

RCMP Revison 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	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 hired a consultant to develop its Title VI Plan and the consultant submitted the draft Plan by November 1, 2013. The plan is under review by Fairfax County.	R
3	2B	FTA to approve MWAA management plans	MWAA submitted the PMP, QPP, SSMP, RCMP, Permit Management Plan and RAMP.	Y	N	N	<i>FTA to provide response to the review of the RCMP, RAMP and Permit Management Plan. FTA has provided responses for all other management plans.</i>	R
1	2B	FTA to confirm whether further NEPA review will be required for changes to the Loudoun and Fairfax parking facility locations.	The parking facilities being procured by Loudoun and Fairfax Counties are being procured with local funds only.	N	N	N	FTA stated that the requirement for a NEPA review/re-evaluation will depend on the location of the parking facilities. NEPA review/re-evaluation may be required for changes to the parking facility locations.	R
1	2A	The assurances <i>and certifications</i> provided by the FTA are not the same as those used by USDOT.	Loudoun County has no problem with the content of the assurances <i>and certifications</i> provided by the FTA; however, Loudoun's legal representative would like clarification.	N	N	N	<i>Loudoun County to follow-up with Mr. Reese (FTA Region 3 Civil Rights) regarding which assurances and certifications are to be included in the Title VI Plan.</i>	R
2	2B	<i>MWAA to provide a copy of the final Baseline Schedule once approved.</i>	<i>The Baseline Schedule for Package A has been received and is currently under review by MWAA. MWAA has 60 days to approve the Baseline Schedule.</i>	N	N	N	<i>Once approved by MWAA, this will be the basis for monitoring the Project.</i>	R

PR	ITEM	IDENTIFICATION	NATURE of PROBLEM	D	A	I	COMMENTS	STATUS
<i>1</i>	<i>2B</i>	<i>MWAA to provide updates at the monthly meetings on the status of the project budget, including the status of expenditures and contingency drawdown.</i>	<i>Monthly project budget updates have not been provided at past monthly meetings.</i>	<i>N</i>	<i>N</i>	<i>N</i>		<i>R</i>

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

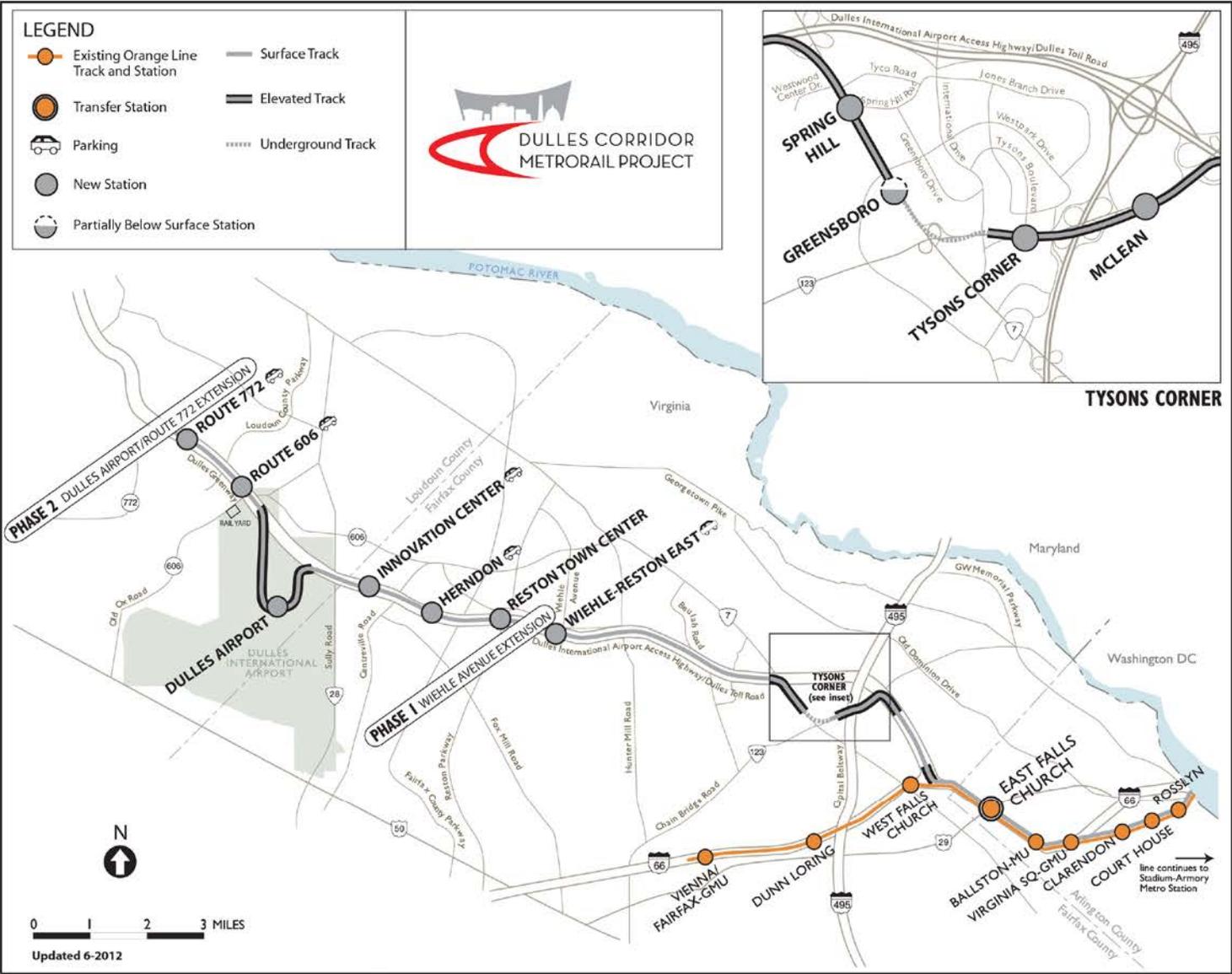
- R – Review On-going
- C – Completed – No further review required

APPENDICES

APPENDIX A – LIST OF ACRONYMS

AHJ	Authority Having Jurisdiction
Board	MWAA Board of Directors
CRC	Capital Rail Constructors
DB	Design-Build
DBE	Disadvantaged Business Enterprise
<i>DHR</i>	<i>Department of Historical Resources</i>
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
SHPO	State Historic Preservation Office
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



APPENDIX C – MWAA SAFETY AND SECURITY CHECKLIST

Project Overview	Dulles Corridor Metrorail Project – Phase 2		
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	Version	Review By FTA	Status
Safety and Security Management Plan	July 2013	Approved on November 15, 2013	MWAA's SSMP Rev.0 dated July 2013 was submitted for review and approval in August 2013 in response to comments provided in May 2013. FTA approved the SSMP on November 15, 2013.
Safety and Security Certification Plan			To be developed by WMATA. (WMATA's SSCPP March 2012 Revision 9 used in Phase 1 was accepted by the FTA on April 13, 2012.)
System Safety Program Plan	January 2013		WMATA's 2013 SSPP is effective January 2013 and approved by TOC on February 15, 2013.
System Security Plan or Security and Emergency Preparedness Plan (SEPP)			WMATA's SEPP is effective March 2012.
Construction Safety and Security Plan			Project is in early DB stage. Contractors to develop plan.

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?	Y	An updated WMATA SSPP dated January 2013 was approved by TOC on February 15, 2013.
Has the oversight agency reviewed and approved the grantee's Security Plan or SEPP as per Part 659.21?	Y	WMATA SEPP approved on April 23, 2012.
Did the oversight agency participate in the last Quarterly Program Review Meeting?	Y	TOC and/or its contractor (TRA) routinely attend the quarterly meetings, including the most recent on December 5, 2013.
Has the grantee submitted its safety certification plan to the oversight agency?	N	
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?	N	To be developed.

Does the grantee implement regularly scheduled meetings to track to resolution any identified hazards and/or vulnerabilities?	N	To be developed.
Does the grantee monitor the progress of safety and security activities throughout all project phases? Please describe briefly.	Y	
Does the grantee ensure the conduct of preliminary hazard and vulnerability analyses? Please specify analyses conducted.	N	
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?	N	In early DB stage.
Has the grantee identified safety and security critical tests to be performed prior to passenger operations?	N	
Has the grantee verified conformance with safety and security requirements during testing, inspection and start-up phases?	N	
Does the grantee evaluate change orders, design waivers, or test variances for potential hazards and /or vulnerabilities?	N	
Has the grantee ensured the performance of safety and security analyses for proposed work-arounds?	N	
Has the grantee demonstrated through meetings or other methods, the integration of safety and security in the following: <ul style="list-style-type: none"> • Activation Plan and Procedures • Integrated Test Plan and Procedures • Operations and Maintenance Plan • Emergency Operations Plan 	N	
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?	N	
Does the grantee's contractor(s) have a documented company-wide safety and security program plan?	N	
Does the grantee's contractor(s) have a site-specific safety and security program plan?	N	
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	
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	

