

PMOC MONTHLY REPORT

East Side Access (MTACC-ESA) Project

Metropolitan Transportation Authority

New York, New York

Report Period July 1 to July 31, 2013



PMOC Contract No. DTFT60-09-D-00007

Task Order No. 7, Project No. DC-27-5235, Work Order No. 1

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Length of time on project: Five years on project for Urban Engineers

TABLE OF CONTENTS

COVER	1
TABLE OF CONTENTS	2
THIRD PARTY DISCLAIMER.....	3
REPORT FORMAT AND FOCUS.....	3
MONITORING REPORT	3
1.0 PROJECT STATUS	3
a. Design	3
b. Procurement	4
c. Construction.....	5
d. Quality Assurance and Quality Control (QA/QC).....	9
2.0 SCHEDULE DATA	10
3.0 COST DATA	11
4.0 RISK MANAGEMENT.....	12
5.0 ELPEP COMPLIANCE SUMMARY.....	13
6.0 SAFETY AND SECURITY	14
7.0 ISSUES AND RECOMMENDATIONS	14

APPENDICES

APPENDIX A – ACRONYMS

APPENDIX B – TABLES

Table 1 – Project Budget/Cost Table (as of June 2013)

Table 2 – Summary of Critical Dates

Table 3 – Comparison of Standard Cost Categories: FFGA vs. CBB

Table 4 – Core Accountability Items – July 2013

THIRD PARTY DISCLAIMER

This report and all subsidiary reports are prepared solely for the Federal Transit Administration (FTA). This report should not be relied upon by any party, except FTA or the project sponsor, in accordance with the purposes as described below.

For projects funded through FTA Full Funding Grant Agreements (FFGAs) program, FTA and its Project Management Oversight contractor (PMOC) use a risk-based assessment process to review and validate a project sponsor's budget and schedule. This risk-based assessment process is a tool for analyzing project development and management. Moreover, the assessment process is iterative in nature; any results of an FTA or PMOC risk-based assessment represent a "snapshot in time" for a particular project under the conditions known at that same point in time. The status of any assessment may be altered at any time by new information, changes in circumstances, or further developments in the project, including any specific measures a sponsor may take to mitigate the risks to project costs, budget, and schedule, or the strategy a sponsor may develop for project execution. Therefore, the information in the monthly reports will change from month to month, based on relevant factors for the month and/or previous months.

REPORT FORMAT AND FOCUS

This report is submitted in compliance with the terms of the Federal Transit Administration (FTA) Contract No. DTFT60-09-D-00007, Task Order No. 002. Its purpose is to provide information and data to assist the FTA as it continually monitors the grantee's technical capability and capacity to execute a project efficiently and effectively, and hence, whether the grantee continues to be ready to receive federal funds for further project development.

This report covers the project management activities on the East Side Access (ESA) Mega-Project managed by MTA Capital Construction (MTACC) with MTA as the grantee and financed by the FTA FFGA.

MONITORING REPORT

1.0 PROJECT STATUS

a. Design

As of June 30, 2013, MTACC reported that the Engineering/Design effort was 97.4% complete in the ESA June '13 Quarterly Progress Report; however the Cost Report shows only 93.1% complete on a cost invoiced basis. The percent complete varies monthly and depends on the award of tasks to the GEC.

The 100% submittal for the Stage 3 catenary design (FHA03) was sent to Amtrak on May 3, 2013 and discussed with them in early July. Amtrak requested a walk-through on July 26th to address the bonding and grounding plan. This walk-through resulted in additional comments on the grounding and bonding plan that the PMT plans to address by August 6, 2013.

The "Issue for Construction" set of plans for Loop Track (FQA65) catenary design package was finalized on July 7, 2013.

Amtrak is currently reviewing the FHA04 Stage 4 catenary 60% design submittal. The PMT is anticipating receiving the go-ahead for the 90% design by August 7, 2013.

The confirmatory set of drawings for CM014B was circulated among the major stakeholders (LIRR, MNR) in April 2013 for assurance that all of their comments have been adequately addressed. A meeting was held on July 29 with LIRR, who indicated their satisfaction with the current design. A similar meeting is being scheduled with MNR, but as of this report a date has not been established.

The GEC issued the signed and sealed drawings for the CM015 package to the PMT on June 3, 2013.

The 90% submittal for CH058 (Harold Structures - Part 3b) has been on hold as a result of the ESA PMT rethinking the method of construction for the eastbound re-route structure (in order to utilize a 45-60 day track outage that may be granted for the work in the future). Possible options are to continue with the current jacked shield tunnel approach or construct the tunnel via an alternate method that can make better use of available track outages, but will require a change to the sequencing of other Harold infrastructure work. LIRR and Amtrak are discussing the matter and plan to decide on a construction alternate and the overall Harold rescheduling in early September 2013.

The GEC repackaging modification for the CM007 package was approved at the June 5, 2013 MTA Board meeting. The modification to the GEC contract to start the repackaging was issued on July 19, 2013. The GEC is reviewing cast in place architectural finish options and is expected to have preliminary findings by mid- August 2013. The GEC forecasts four to six months to complete the package.

Provision of the stand-alone Track and Signal Installation Contract package (CS284) is progressing with an expected completion date of September 30, 2013. The GEC is verifying that "lessons learned" from the NYCT No. 7 Line extension track installation have been addressed in the bid documents. The Traction Power Contract package (CS084) is progressing with an anticipated completion date of August 30, 2013.

b. Procurement

As of the end of June 2013, the total procurement activity on the project was reported to be 62% complete, with \$5.131 billion in contracts awarded to date. However, since ESA calculates against a \$8.245 billion budget (without the Rolling Stock), the PMOC believes that the actual percentage procured of the \$8.708 billion current baseline budget is closer to 58.9%.

The second new contract package of the CM012R repackaging, CM006 (northern structures), is under development and was initially planned to be advertised by July 1, 2013; however, this date was not met and the advertise date was re-forecast to August 1, 2013. This date will also not be met and the PMT has not provided a forecast for a new date.

The third new contract package CM007 (caverns) is also under development. The advertise date for this package remains TBD.

The continuing slippage (since the December 1, 2012 forecast) of awarding CS179 (Systems Package 1) remains a major concern. The planned NTP remains TBD. This Contract is on the critical path of the latest formal full IPS updated of October 2013 and by not awarding it by the end of 2012 as originally planned, there will be a direct impact on project schedule contingency. MTACC committed in April 2013 to have a recommendation for award ready to present to the MTA Board in July 2013, but negotiations with several proposers continued as of the end of July 2013 and that date was not met. The ESA team received the Revised Cost and Schedule Proposals that included schedule, material and personnel access information on July 26, 2013 and is currently reviewing it. The ESA PMT is now forecasting award of this contract in late September/early October 2013, after the September 2013 MTA Board meeting.

The PMT has decided to split the Tunnel Systems Package (CS284) into two packages: one for track work and one for the traction power work. Procurement dates for this package are now TBD. This will have an impact on the Systems Package 1 Contractor, who is responsible for systems integration for these packages. NTP for the Signal Equipment package (VS086), which is being negotiated as an RFP, is also TBD.

The latest IPS update indicates that the CM014B package will be ready to advertise on September 1, 2013.

The CH057A (westbound bypass work) package was advertised on May 7, 2013, with a bid opening date currently planned for August 8, 2013 (one week slip since last month). Remaining work in CH057 is currently forecast in the IPS to be advertised in August 2013, with NTP forecast for January 2014; however, this is not consistent with the latest information regarding the possible re-scoping of the package, which according to the PMT will push the advertise date out to sometime in 4Q2013.

c. Construction

The PMT reported in its June 2013 Quarterly Progress Report that the actual construction progress was 52.3% vs. 54.0% planned

Manhattan: CM009/019 – Manhattan Tunnels Excavation/Structures Part 1: The Estimate at Completion (EAC) for the CM009 contract had been \$402,773,000 for the past several months, but it was reduced to \$402,706,000 during June 2013. Substantial Completion (SC) of the base contract was achieved on June 1, 2013, but the MTACC awarded additional work to the contractor for shotcrete and invert concrete placement in 3 previously excavated caverns and created new Milestone 9A with an SC date of September 30, 2013. This work is advance for the CM006 contract. Actual progress for June 2013 was 0.1% versus 1.0% planned. Cumulative progress through June 30, 2013, was 96.1% versus 97.0% planned (based on new Substantial Completion date).

The EAC for the CM019 contract had been \$791,633,000 for the past several months, but it was reduced to \$791,205,000 during June 2013. All contract work was completed and Substantial Completion was declared on June 1, 2013. Only punch list items remain and Final Completion is on schedule for August 15, 2013. Actual progress for June 2013 was 0.2% versus 1.7% planned.

Cumulative progress through June 30, 2013, was 99.9% actual versus 97.9% planned (the MTACC offers no explanation of why the planned cumulative per cent complete is not 100.0%).

Construction Progress: Continued shotcrete application in GCT5 West Wye, waterproofing and drainage installation in GCT3 crossover, and excavation of “tights” and waterproofing repairs in GCT4 crossover.

CM013 – 50th Street Vent Facility: The EAC remains at \$126.41 million as of June 30, 2013 as reported in the April – June 2013 ESA Quarterly Report. Forecast Substantial Completion date remains at November 2013. As of June 30, 2013, MTACC reports that the actual percent complete was 84% vs. 99.9% planned.

Construction Progress:

- Concrete encasement of columns & beams is complete.
- Installation of metal deck and concrete slab placement at the upper floors is near completion.
- Concrete block wall erection throughout the building is near completion.
- 50th St. utility backfilling is near completion and removal of street decking is underway for the commencement of street restoration.
- The Stop-Work-Order on Pneumatically applied concrete is still in effect.

CM013A – 55th Street Vent Facility: MTACC reports that through June 30, 2013 the EAC remained at \$58.85 million. Forecast Substantial Completion date remains April 5, 2015. As of June 30, 2013, MTACC reports that the actual percent complete is slightly ahead of schedule at 13.4% vs. 11.9% planned.

Construction Progress:

- ConEd utility tie-in installation work continues.
- Mechanical rock excavation is continuing under the southwest street decking.
- Shotcreting on the eastside north and south walls will begin on August 17, 2013.
- Blasting is scheduled to start in October 2013 depending on ConEd progress.

CM004 – 44th Street Demolition and Fan Plant Structure; 245 Park Avenue Entrance: MTACC reports that through June 30, 2013 the EAC was \$63.33 million from the previous \$62.85 million due to completed negotiations of outstanding contract modifications (change orders). The Forecast Substantial Completion date is now January 15, 2014 from the previous December 15, 2013 for the Vent Plant. Substantial Completion for the 245 Park Entrance is now forecast for January 15, 2014 from the previous July 5, 2013 due to delays in the permitting for the 44th Street utility work and the ongoing delays with MNR on finalizing work at 243 Park Avenue. The actual percent complete is 84.6% versus 94.21% planned.

Construction Progress

- Shotcreting of column encasements has been ongoing and is near completion.
- Installation of fabric reinforcing for the beam concrete encasements is underway.
- Intumescent painting continues at the building interior.

- CMU block walls erection continuing at building perimeter, ground floor to 3rd floor.

CM014A– Concourse and Facilities Fit-Out: MTACC reports that through June 30, 2013 the EAC increased to \$52.00 million from the previous \$51.99 million. Forecast Substantial Completion date remains extended to February 15, 2014 due to the delays in the Supervisory Control and Data Acquisition (SCADA) system redesign. The actual percent complete reported is 44.2% versus 79% planned. This contract is not currently on the critical path.

Construction Progress:

- Surveying and layout is ongoing.
- Erection of Concrete Masonry Units (CMU) walls is ongoing in Zones 1 & 2.
- Continued installing hollow metal door frames.
- Fabrication of equipment continues.

Queens: CQ031 – Queens Bored Tunnels and Structures: The Estimate at Completion had been \$784,964,000 for the two months prior to June 2013, but, as of June 30, 2013, it was reduced to \$780,384,000. The MTACC forecast for Substantial Completion of the amended CQ031 contract has been extended to March 12, 2014. The amended contract presently includes installation of secant piles and support of excavation (SOE) for the extension of Tunnel A and construction of a concrete slab for track support under Amtrak/LIRR Lines 2 and 4 for the future Westbound Bypass tunnel. Actual construction progress for June 2013 was 0.7% versus 0.0% planned (the MTACC has not projected the additional CQ031 planned work yet). Cumulative progress through June 30, 2013, was 96.6% actual versus 100.0% planned.

Construction Progress: During July 2013, the contractor completed all work in the Yard Lead Emergency Exit and B-13 Substation buildings. Additionally, as of July 18, 2013, the contractor had installed a total of 91 secant piles (of 246) for the Tunnel A extension as part of its amended contract. The contractor also installed the concrete slab under Line 2 for the future Westbound Bypass tunnel during the second half of July 2013.

CQ032 – Plaza Substation and Queens Structures: The EAC increased slightly to \$192,700,000 as of June 30, 2013. The MTACC forecast Substantial Completion date was shortened by one week to June 30, 2015. Actual construction progress for June 2013 was 4.7% versus 7.4% planned. Cumulative progress through June 30, 2013, was 30.4% actual versus 57.8% planned.

Construction Progress: The contractor completed all construction on the Vernon Blvd., 12th St., and 29th St. facilities and all construction except the mechanical room in level P6 at the Roosevelt Island facility during July 2013. The contractor also continued to install CMU walls around the outside perimeter of the B-10 Substation and continued invert concrete placement for Tunnels A, D, and the Yard Lead, sidewall waterproofing and shotcrete placement, and steel erection for the Plaza substation in the Open Cut.

CQ039 – Northern Boulevard Crossing: The EAC decreased \$900,000 from \$102.5 million to \$101.6 million reflecting finalization of certain change orders. The forecast Substantial Completion recovered 2 weeks from August 26, 2013 to August 13, 2013. The actual percent complete is 95.9% versus 100% planned. This Contract is not on the project critical path as reported in the last IPS update.

Construction Progress: The load transfer of the elevated NYCT-BMT structure from the temporary underpinning system to the new tunnel structure was completed on June 26, 2013. The removal of the temporary underpinning system commenced in July 2013.

Harold Interlocking: CH053 Contract – Harold Structures Part 1 and G.0.2 Substation:

The EAC was reduced to \$281,038,000 during June 2013, but the MTACC's forecast Substantial Completion date remained at May 6, 2014. Actual construction progress for June 2013 was 2.1% versus 0.0% planned (project was supposed to be complete). Cumulative project completion as of June 30, 2013, was 79.8% actual versus 100.0% planned.

Construction Progress: The contractor continued to install 12kV ductbank and cable at various locations throughout the project site, construct retaining walls 43-S2 and 48-S1, install piles for the ML4 bridge abutments at 43rd and 48th Streets, continued construction of the Tunnel A Approach Structure, and began removal of the existing signal tower line between towers 28 and 33.

CH054A – Harold Structures Part 2A: The PMOC notes that the MTACC's forecast EAC for CH054A has reverted to \$64,271,000 as of June 30, 2013. The forecast for Substantial Completion has likewise been lengthened by one week to April 8, 2014. Actual construction progress for June 2013 was 1.2% versus 0.0% planned (project was supposed to be complete). Cumulative project completion as of June 30, 2013, was 52.8% actual versus 100.0% planned. Although construction of the 12kV ductbank has resumed after a lengthy delay due to re-design requested by Amtrak, the PMOC does not believe that the contractor will be able to achieve any substantial schedule recovery.

Construction Progress: During July 2013, the contractor continued to install 12kV ductbank at various locations throughout the project site.

Railroad Force Account:

FHA01 – Harold Stage 1 Amtrak: The PMT reported that the EAC for FHA01 was reduced during June 2013 to \$16,382,000. The MTACC's forecast for Substantial Completion for FHA01 remains at May 6, 2014. Actual progress for June 2013 was 0.4% versus 1.1% planned. Cumulative construction progress as of June 30, 2013, was 89.0% actual versus 91.2% planned. The bulk of the remaining FHA01 construction consists of Electric Traction (ET) relocation of catenary wires on structures erected by the CH053/CH054A contractor, as well as ET protection for the contractor.

Construction Progress: Amtrak ET personnel concentrated efforts during July 2013 to make the catenary modifications required to support the CQ031 installation of the concrete slab under Line 2 for the future Westbound Bypass tunnel.

FHA02 – Harold Stage 2 Amtrak: The PMT reported that the EAC for FHA02 reverted again to \$38,495,000, which represents a reduction from its May projection of \$40,538,000 (the MTACC offered no explanation for this). The MTACC also extended the forecast Substantial Completion to December 8, 2014, an additional 3 weeks. Actual construction progress for June 2013 was 5.2% versus 1.7% planned. Cumulative construction progress as of June 30, 2013, was 65.0% actual versus 78.9% planned. Remaining work in the present FHA02 Project Initiation authorization includes Communications and Signals (C&S) installation and cutover of "F1"

interlocking and installation of the alternate control systems for “F” and Harold Interlockings (FHACS).

Construction Progress: Amtrak Track personnel reconstructed approximately 1,000 LF of Line 2 after the CQ031 contractor installed the concrete slab for the Westbound Bypass tunnel during July 2013, while C&S personnel continued to make signal modifications necessary to install and cutover “F1” Interlocking, which is scheduled for early November 2013.

FHL01 – Harold Stage 1 LIRR: The EAC for FHL01 was reduced slightly to \$21,860,000. The PMT has extended its forecast Substantial Completion date to September 3, 2014. No construction progress was made on FHL01 during June 2013 because all LIRR Force Account efforts were concentrated on FHL02 work. Cumulative construction progress as of June 30, 2013, was 75.2% actual versus 83.1% planned. Remaining FHL01 work includes installation of track turnouts, C&S equipment installation to prepare for Stage 2 cutovers of Harold and Point Interlockings, traction power relocations and cutover of the signal power line and cable installation for the re-located GO2 Substation.

Construction Progress: No construction progress was made on FHL01 during July 2013.

FHL02 – Harold Stage 2 LIRR: The EAC for FHL02 was reduced slightly during June 2013 to \$64,457,000. The MTACC’s forecast for Substantial Completion remains at November 13, 2015. . Actual construction progress for June 2013 was 0.2% versus 1.4% planned. Cumulative progress as of June 30, 2013, was 25.2% actual versus 28.6% planned. Remaining work in FHL02 includes the installation of 15 track turnouts and construction of two additional main line tracks along with associated signal and traction power improvements, C&S installation and cutover of 6 CILs in Harold Interlocking, and the installation of the Harold Tower Supervisory Control System (HTSCS).

Construction Progress: During July 2013, LIRR Force Account Track personnel installed a new turnout and reconstructed approximately 900 LF of track on Line 2 as part of the summer outage to install the concrete slab for the Westbound Bypass tunnel under Line 2. C&S personnel continued to make signal modifications for the cutovers of 3 Central Instrument Locations (CILs) in Harold Interlocking, and Traction Power personnel continued relocation of signal power apparatus in preparation for the signal power cutover at the east end of Harold Interlocking.

d. Quality Assurance and Quality Control (QA/QC)

ESA Project Quality Manual (PQM): The ESA Quality Manager and MTACC’s Chief of Quality, Safety, and Site Security are finalizing a draft of Revision 7 of the PQM and it is scheduled to be sent to the PMOC for review by the end of August 2013.

Submission of As-Builts: The single construction contractor working on the CH053, CH054A, and CQ032 contracts remains late in submitting as-built drawings. The ESA Program Office continues to indicate that they will withhold funds if the contractor is not up to date and compliant. So far, this has not occurred. The PMOC is concerned that this issue is still not resolved and recommends that ESA press to bring this issue to closure.

CH053, CH054A, and CQ032 Quality Issues: The single construction contractor working on the CH053, CH054A, and CQ032 contracts remains delinquent in responding to Surveillance Reports and closing Nonconformance Reports. The PMOC continues to recommend that ESA

Management meet with the contractor's management to obtain a commitment from the contractor to respond to these reports in a timely manner. To date, this has not occurred.

Technical Capacity and Capability (TCC)-Training: In mid-July 2013, training was conducted on eight MTACC Quality Procedures and six MTACC Construction Procedures. The PMOC attended both training sessions, which went well. Training for seven additional Construction Procedures is scheduled to be conducted in early August 2013. MTACC plans to conduct training sessions every two weeks and cover additional subjects including Safety and Administration. The PMOC will continue to monitor progress in this area.

2.0 SCHEDULE DATA

The PMT did not submit its IPS#49 this month, and stated the following in the Executive Summary of the June 2013ESA Quarterly Progress Report:

“ESA is currently performing a program level re-plan, with a target for issuing a revised baseline for review by mid-September 2013. Until such time as that re-baseline is issued, the monthly schedule report will only contain narrative and the CSSR table for future contracts. Including any bar charts or schedule reports will only generate confusion, as the current IPS does not accurately reflect the plan for completion, and the revised IPS is in constant flux until the remaining packages, their points of interface, and coordinated access can be worked out. The following items are being addressed as part of the re-planning effort. Active construction and those contracts that have been reviewed and vetted will be included in an updated IPS.”

- The ESA also stated that CM005 schedule has been updated and a two-month “handoff buffer” has been included following appropriate milestones and before follow-on work. Similar activities will likely be included as additional contracts are added to the IPS.
- ESA is adjusting the CM006 schedule is being finalized to incorporate the results of the recent risk workshop, and will be finalized prior to issuing bid documents in early August. The current duration being shown is 32 months. A two-month contingency will be included. An interim milestone to turn over the lower level has been established and has been initially set at 24 months following NTP. This interim milestone will allow the start of CS179 as well as the start of CM007 work in both caverns. In order to optimize the use of this milestone, ESA will analyze and determine what is the most logical and optimum approach for the CM007 scope that is planned to start concurrent with the ongoing CM006 construction.

Additionally, ESA reported that contract CM014B will be advertised on October 1, 2013, and bids for contract CH057A will be received in August 2013.

Project Critical Path: The current project critical path cannot be determined until the future contracts are incorporated and properly linked in the IPS. The ESA critical path goes through Contracts CM005, CM006, CM007, CS179, CS284, and Integrated Testing and Operational Readiness.

Schedule Contingency: The previous IPS update indicated that the entire project schedule contingency has been utilized. The re-planning effort will have to incorporate a new level of contingency into the baseline schedule.

3.0 COST DATA

Funding: MTACC announced at the May 2012 Capital Program Oversight Committee (CPOC) meeting that an additional \$720 million will need to be identified in the MTA 2015 – 2019 Capital Plan to cover the new project baseline budget. The funding request for the 2015 – 2019 Capital Program will be submitted to the NYS Capital Program Review Board (CPRB) in September 2014. The MTA will review any budget changes resulting from the new packaging plan for CM012R and compare it to the current MTA Capital Plan. Results of this comparison were to be discussed internally with the MTA Board in July 2013. The PMOC has not been informed as to whether or not this discussion occurred.

Budget/Cost: The PMT has reported that as of June 30, 2013, the actual total project progress was 56.5% vs. 57.7% planned progress resulting from the Current Baseline Budget (CBB) and the actual construction progress was 52.3% vs. 54.0% planned based on invoiced amount.

As of June 30 2013, the Current Baseline Budget (CBB) as shown in the Standard Cost Categories (SCCs) has re-stabilized at the baseline value of \$8.708 billion. There were multiple changes in SCCs this month arising from transfers of scope related to the former CM012R Package. SCC #10 decreased by \$18 M, SCC #20 increased by \$20M, SCC #30 increased by \$4M, and SCC #50 decreased by \$21M. This reflects the errors in the cost allocation set-up initially made by the PMT for tracking and reassigning costs by SCC. Short of a new re-baseline and a full reallocation of SCC costs on a more stable basis, this will continue to be an issue that arises monthly.

Also, despite the rejection of low bid for CM012R in October 2012 because it was more than \$350M above the PMT budget for this package, and the recent Bid received for CM005 which is approximately \$65M above the existing Budget for that work, the PMT continues to maintain its pre-bid estimate value in the Current Baseline Budget (CBB), and just uses the original budget reduced by actual contracted amounts to reflect the funds available for the remaining scope of work. The PMT will not make any adjustments because changes have not been approved by MTACC Senior Management, so what might appear to represent expected costs is solely a statement of the ESA budget, which was set and will not be modified at present. ESA has indicated it is re-examining the Project Cost and Schedule; with schedule results anticipated for mid-September, and cost results anticipated before the end of 2013.

The current Budget and Cost data is shown in Table 1 in Appendix B of this report. Table 3 in Appendix B of this report shows a comparison of the FFGA Baseline Budget in Standard Cost Categories (SCC) vs. the MTA's CBB.



Change Orders/Budget Adjustments: The PMT reported that during June 2013, there were 6 change orders executed over \$100K, with a net value of \$2.8M.

4.0 RISK MANAGEMENT

Status: ESA committed to holding Monthly Risk Review Meetings but has only achieved a bi-monthly rate. The last meeting was held on July 31, 2013. The following items were discussed at the meeting:

- The PMOC requested an updated ESA Program risk register which will be provided by the next monthly risk meeting.
- At the suggestion of the PMOC, the PMT presented an overview of some lessons learned for the systems work on the current MTACC NYCT No. 7 Line extension project. The discussion focused on several areas including conduit interface across contracts; working in a shared environment; existing facilities; and track work. The goal is to incorporate these lessons into the management and coordination of the ESA Systems contracts.
- An update of the Risk Register for Contract packages CM005/CM006/CM007 was presented. There was minimal discussion on the rating or mitigation strategies, the focus at this meeting was on the re-categorization of previous risks identified in CM012R as well as incorporation of new items for CM006 identified at the risk workshop held in June 2013.
- A brief update on preliminary results of the CM006 Risk Workshop was presented. A re-run of the risk model by the facilitator is anticipated, with results expected in August 2013. The procurement of CM006 has been delayed beyond the previously forecast August 1, 2013 advertisement date.
- The project-specific Risk Workshops for CM014B and CM007 are forecast to be scheduled in September 2013 and early next year, respectively.
- The systems work and associated packages (CS179, CS284, and CS084) continue to be evaluated for interface issues with a focus on access milestones. ESA is planning to re-run the risk model developed from the April 2013 Systems Risk Workshop in August 2013 using revised data based on a more current definition of the interface milestones associated with the CM012R repackaged contracts(CM005;CM006;CM007).
- The PMOC inquired about the status of the Contract Packaging Plan and was told that the plan continues to be updated. There is currently no forecast date for issuance of this plan.
- The PMOC noted that a Risk Assessment for the CM005 Contract package was not performed and suggested that the risks associated with this package be discussed at the next risk meeting.
- The PMOC noted that the PMT has experienced the loss of some key senior management staff within the last month which places extra demands on current staff to meet the project needs, thus creating a risk to the Technical Capacity and Capability of the PMT.

Current Risk Mitigation Efforts

Once the results of the CM006 Risk Assessment have been finalized, ESA is planning to initiate mitigation and contingency reviews for this package.

ESA has greatly compressed the schedule for the remaining work for the project because of slippages which have occurred and longer durations for current work. ESA has tried to

‘mitigate’ delays by overlapping the civil construction work with the Integrated System Testing. The PMOC is concerned that this approach places additional burden on the contractors to meet unrealistic goals and may not be achievable.

5.0 ELPEP COMPLIANCE SUMMARY

The current status of each of the main ELPEP components is summarized as follows:

- **Technical Capacity and Capability (TCC):** MTACC issued ESA PMP draft Revision 9.0 on June 28, 2013, and the PMOC has commenced its review. Regarding PMP training, the PMOC has been advised that MTACC has completed its audits to establish where training efforts need to be focused. The audit report will be available in August 2013. MTACC started procedures training in July 2013. The PMOC will continue to monitor progress in this area. PMOC’s review of the MTACC update to the March 2010 Technical Capacity and Capability Plan for ESA and SAS is in progress.
- **Risk Mitigation Capacity Plan (RMCP):** FTA-RII provided its conditional acceptance of the RMCP in its May 24, 2012 letter to MTACC. The PMOC has verified RMCP final acceptance based on its incorporation into the RMP.
- **Risk Management Plan (RMP):** FTA formally notified MTACC of its conditional acceptance of the RMP (Rev. 2) by letter dated March 4, 2013, based on MTACC correcting an error and expanding discussion of certain risk and mitigation topics.
- **Continuing ELPEP Compliance**

The current status of each of the main ELPEP compliance components is summarized as follows:

- Management Decisions
 - Status: IMPROVEMENT NEEDED.
- Design Development
 - Status: IMPROVEMENT NEEDED.
- CCC Process and Results
 - Status: IMPROVEMENT NEEDED.
- Stakeholder Management
 - Status: IMPROVEMENT NEEDED.
- Issues Management
 - Status: IMPROVEMENT NEEDED.
- Procurement
 - Status: IMPROVEMENT IS NEEDED.
- Timely Decision Making
 - Status: IMPROVEMENT NEEDED.
- Risk-informed Decision Making
 - Status: IMPROVEMENT NEEDED.

The ELPEP Quarterly Review Meeting with MTACC, FTA-RII, SAS and ESA projects and the PMOC was held on July 2, 2013.

With MTACC's submission of its East Side Access FTA Quarterly Report (Apr, May, Jun '13); however, the PMOC notes that the ESA project is not in compliance with ELPEP and is not meeting some of the more important requirements of the SMP and CMP sub-plans to the PMP. The PMOC's major areas of concern include:

- **ELPEP:** MTACC is not forecasting and trending either cost or schedule contingency accurately because it does not include the significant impacts of the CM012R bid over budget occurrence in 4Q2012. ESA has not accurately calculated the schedule contingency utilization resulting from the repackaging of CM012R and the major procurement delays. ESA has also not addressed the need for utilizing project cost contingency to cover the budget shortfall.
- **Schedule Management Plan:** ESA is non-compliant with requirements for: IPS Updating, Forecasting, and Schedule Contingency Management.
- **Cost Management Plan:** ESA is non-compliant with requirements for: Cost Estimating, Contract Level EAC Forecasting, Project Level EAC Forecasting, Project Level EAC Forecast Validation, Monthly Update Process and MTACC Cost Contingency Management and Secondary Mitigation.

Revisions to the ELPEP Document: On March 19, 2013, MTACC provided to the FTA and the PMOC their proposed revisions to the ELPEP. The FTA and MTACC have agreed to hold working meetings to progress development of a revised ELPEP. These meetings had been expected to start during 2Q2013 but have been delayed pending an agreement on how to proceed without the revised ESA cost and schedule baselines.

6.0 SAFETY AND SECURITY

Project safety statistics for lost time accidents continue to trend above the Bureau of Labor Statistics (BLS) national average at 2.25 vs. 2.20 lost time accidents per 200,000 hours. Although there has been continuing improvement in the overall project safety statistics (2.25 vs. 2.30 during the last reporting period), several contracts have statistics above the average for the project. For the CM004 Contract, the lost time accidents are trending above the ESA Project average (3.21 vs. 2.25 lost time accidents per 200,000 hours). On the CQ039 contract, the lost time accident statistics continue to trend well above the ESA Project average (5.19 vs. 2.25 lost time accidents per 200,000 hours).

ESA did not report any significant security issues for the June 2013 reporting period.

7.0 ISSUES AND RECOMMENDATIONS

Design: The PMOC remains concerned that the GEC and PMT continue to consistently miss all of their target dates for remaining design activities on the project, not just catenary design.

Procurement: The lack of stability in the Contract Packaging Plan remains a concern. The PMT continues to shift and split scope among different packages, making it difficult to fully understand the impact of these changes to the overall ESA Program at this time. The ESA PMT is now looking at repackaging the CH057 and CH058 Contracts. The PMOC recommends that

the PMT give priority to producing an updated Contract Packaging Plan and adhere to it without shifting scope for the remainder of the project.

The August 1, 2013 planned advertise date for the CM006 (northern structures) package will not be met (this is the second time advertise date has slipped, initial forecast for advertising was July 1, 2013). Advertise date for the CM007 (caverns) package remains TBD. These are critical packages and the continuing slippage of the procurement dates for them is of concern.

The PMOC also remains seriously concerned about delays to other significant procurements namely; Systems Package 1 (CS179) (currently in negotiations since 2Q2012); CS184 (Tunnel Systems which has now been split into two packages); VS086 (Signal Equipment) and CM014B (GCT Concourse and Fit-out). The Systems work is on the project critical path and award dates for the Systems packages remain TBD.

Contract CM004: As previously reported, at 245 Park Avenue neither the MTACC nor MNR has issued a document to the Contractor that they accept the testing performed on the escalator that was conducted in October 2012, although MNR has advised MTACC verbally that test results were acceptable. The Project Office has advised the PMOC that commissioning of the escalator will finally be done in September 2013. The PMOC remains concerned that the long period of not operating or maintaining the escalator may have caused damage to the unit.

Contract CM013: Through June 30, 2013, the stop work order issued by the MTACC Code Compliance Unit (CCU) for the application of Pneumatically Applied Concrete (PAC) was still in effect. The PMOC remains concerned that the issues raised by the CCU, though valid, were not brought up until almost a year after the PAC operations began and almost 90% of the PAC has been completed. The PMOC is concerned that this may impact the Substantial Completion date of the project.

Contract CQ032: The PMOC notes that the gap between the actual progress and planned progress for the CQ032 contract continues to increase. In the ten months since September 2012, the difference has increased from 2.7% to 27.4%. Even though the PMT has informed the PMOC that the Contract will be re-baselined, which could alleviate this discrepancy, it has not yet been done and the PMOC remains concerned that the contractor will not be able to recover any of the lost time. The PMOC recommends that MTACC-ESA expedite development of the re-baselined schedule and follow the plan exactly.

Contract CQ039: The PMOC had previously noted that the load transfer for the elevated NYCT subway line from the temporary underpinning system to the new tunnel structure had been delayed for various reasons. The ESA Code Compliance Unit stop work order has been rescinded, the load transfer was completed in late June 2013 and the contractor has started removal of the temporary underpinning system. Late completion of the CQ039 contract has delayed full turnover of the Milestone 1A area, originally scheduled for July 30, 2012, and the start of Contract CQ032 work in the Early Access Chamber area (CQ032 Access Restraint #1, August 24, 2012) at the west end of the Queens Open-Cut Excavation Area. Although significant access had been granted to the CQ032 contractor since that time, the contractor still will not have full, unimpeded access to this area until August 2013.

Contracts CH053/54A: The PMOC remains concerned that costs continue to increase in response to continuing delays to the Substantial Completion date. Although the PMT and the contractor had stated that they were negotiating to establish a revised construction schedule that

would result in a Substantial Completion date of December 31, 2013, it now appears as if that will not be the case and SC will stretch into 2014. Based on its historical progress and its present percent complete, the PMOC estimates that SC will be mid-3Q2014, although the PMT forecasts SC for mid-2Q2014. In order for the PMT to accomplish this, the PMOC recommends that it place increased priority on the Force Account support that it supplies for the CH053/CH054A contractor (Amtrak and LIRR supply a fixed amount of support for all ESA contracts and the ESA PMT decides how that support is distributed among the contracts).

Railroad Force Account: During July 2013, both LIRR and Amtrak completed the track construction that each had scheduled on Line 2 in Harold Interlocking in coordination with the CQ031 contractor as it installed the concrete slab for the future Westbound Bypass tunnel. This will be followed in August 2013 with additional track work reconstruction on Line 4 in Harold. Together, this work will represent a major accomplishment for the 2013 construction season. The PMOC notes that this work, to date, has been done on schedule and according to design. As a result, the PMOC recommends that the parties continue their close coordination with one another in order to keep the 2013 construction program, which is aggressive by ESA standards, on schedule. This will, in turn, lay the foundation for successfully coordinating future years' construction when schedules will be even more aggressive. Also, the Budget set for the Force Account is unreasonably low and does not reflect the entire scope or the Force Account requirements. The FA package estimates have continued to rise, so the PMOC recommends that ESA pay special attention in its re-evaluation of project costs to reflect a realistic projection for Force Account.

Project Funding/Budget: The PMOC remains concerned about the results of the CM012R bid cancellation and its impact on the project budget. The PMT has not adjusted its CBB (or contingency drawdown) to account for the CM012R bid overrun costs. The PMOC believes that the cost overrun on the cancelled CM012R solicitation will leave the ESA Project with a budget shortfall, which will impact the project's ability to mitigate future cost increases, and may also impact the ability to make timely awards of future contract packages. As of this report the ESA PMT continues its monthly financial reporting as if the bid cancellation had not occurred. The President of MTACC stated at the July FTA/MTACC Executive meeting that the budget forecast will not be completed until later in 2013; MTACC is waiting for the final cost for the CS179 Contract, which MTACC is now forecasting recommendation to award by September 2013; the final construction cost estimate for the CM006 Contract; which is forecast to be advertised in August 2013; and the cost estimate for CM007 (currently under development) before providing a forecast. The PMOC continues to recommend that ESA include the results of the CM012R bid overrun and continuing delays in awarding packages in its official monthly financial forecasting and reporting. The PMT is obligated under the ELPEP agreement to provide accurate budget updates and forecasts and by not doing so are non-compliant with the following requirements set forth in the CMP:

- Cost Estimating Section 5.2;
- Contract Level EAC Forecasting Section 5.3;
- Project Level EAC Forecasting Section 5.4;
- Project Level EAC Forecast Validation Section 5.5;
- Monthly Update Process Section 5.7;

- MTACC Cost Contingency Management and Secondary Mitigation Section 6.1.

Project Schedule: ESA stated in its June 2013 Quarterly Report that it is currently performing a Program level re-plan, with a goal of issuing a revised baseline for review by mid-September 2013 (as stated above). The PMT is obligated under the ELPEP agreement to provide accurate schedule updates and forecasts and by not doing so are non-compliant with the following requirements set forth in the SMP:

- IPS updating: Section 5.2, requirement for updating IPS on a monthly basis.
- IPS component schedules and monthly update: Section 5.3
- IPS update process: Section 8.2 documentation
- Forecasting Requirements: Section 5.4, requires that the PMT identify budget and cash flow issues that may impact the project.
- Milestones and RSD slippage recovery process; Section 5.5.
- Schedule Forecasting and Reporting Process; and Schedule Contingency Management: Section 6.

Risk Management: The PMOC remains concerned that the complexity, risk, and coordination of the construction activities previously associated with the CM012R solicitation documents, as viewed by the contracting community, will likely prove to be more challenging than previously accounted for in MTACC's internal cost estimate and schedule allowance. The ESA estimate for the CM005 package did not fall within the mid-range of the received bids indicating, in the PMOC's opinion, that the estimate was low. Given that MTACC's stated goal is to use the results of the CM005 procurement as a guideline for estimating the CM006 and CM007 packages, the PMOC recommends that MTACC and the ESA PMT carefully re-evaluate the current preliminary estimate for the CM006 package and keep this in mind as the estimate for CM007 is developed.

ESA has greatly compressed the schedule for the remaining work for the project because of slippages which have occurred and longer durations for current work. ESA has tried to 'mitigate' delays by overlapping the civil construction work with the Integrated System Testing. The PMOC is concerned that this approach places additional burden on the contractors to meet unrealistic goals and may not be achievable.

The CM005 Contract package was advertised in March 2013 without a Contract level risk assessment or a constructability review being performed. The PMOC is concerned that the low bidder who has not performed similar work in the New York City region, and is trying to break into a new market, was 19% lower than the next lowest bid of \$238M, and approximately \$40 million lower than the average of all bids. The core three bids were clustered between \$238M and \$258M. The firms in this bid range are very experienced in this type of work in New York City, and most likely included a prudent amount of risk into their bid prices. The PMOC believes that the low bidder may not have fully understood the risks associated with this contract and recommends that ESA evaluate the risks associated with this contract and provide for adequate contingency.

The PMOC is concerned about the timing and results of the Systems Risk Workshop, which was held in April 2013. The MTA Director of the Office of Capital Program Oversight stated that he

believed the results of that Workshop were of limited value, since interface milestones for CM005; CM006; and CM007; were not accurately defined at that point. One of the goals of the Workshop was to provide data that would be useful to aid in progressing negotiations on the CS179 Systems Package 1 Contract. He directed that the risk model be run again, with more accurate data. MTACC is planning to rerun the model in August 2013, however since they are also trying to make a recommendation for award of the CS179 Contract in the same time frame, the PMOC does not believe that the results will be of any use in the negotiations.

APPENDIX A – ACRONYMS

ARRA	American Recovery and Reinvestment Act
BA	Budget Adjustment
BAFO	Best and Final Offer
C&S	Communications and Signals
CBB	Current Baseline Budget
CCC	Change Control Committee
CCM	Consultant Construction Manager
CD	Calendar Days
CM	ESA Construction Manager (assigned to each contract)
CMP	Cost Management Plan
CIL	Central Instrument Location
CPOC	Capital Program Oversight Committee
CPRB	Capital Program Review Board
CPP	Contract Packaging Plan
CWP	Construction Work Plan
EAC	Estimate at Completion
ELPEP	Enterprise Level Project Execution Plan
ERT	East River Tunnel
ESA	East Side Access
ET	Electric Traction
FA	Force Account
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
GCT	Grand Central Terminal
GEC	General Engineering Consultant
IPS	Integrated Project Schedule
IST	Integrated System Testing
LIRR	Long Island Rail Road
MNR	Metro-North Railroad
MPT	Maintenance and Protection of Traffic
MTA	Metropolitan Transportation Authority

MTACC	Metropolitan Transportation Authority – Capital Construction
NATM	New Austrian Tunneling Method
NTP	Notice to Proceed
NYCT	New York City Transit
OSHA	Occupational Safety and Health Administration
PE	Preliminary Engineering
PMOC	Project Management Oversight contractor (Urban Engineers)
PMP	Project Management Plan
PMT	ESA’s Project Management Team
QA	Quality Assurance
RAMP	Real Estate Acquisition Management Plan
RFP	Request for Proposal
RMP	Risk Management Plan
RMCP	Risk Mitigation Capacity Plan
ROD	Revenue Operations Date
RSD	Revenue Service Date
SC	Substantial Completion
SCADA	Systems Control and Data Acquisition
SCC	Standard Cost Category
SEM	Segmental Excavation Method
SMP	Schedule Management Plan
SSMP	Safety and Security Management Plan
SSPP	System Safety Program Plan
SWP	Safety Work Plan
TBD	To Be Determined
TBM	Tunnel Boring Machine
TCC	Technical Capacity and Capability
VE	Value Engineering
WBBY	Westbound Bypass
WBS	Work Breakdown Structure

APPENDIX B – TABLES

Table 1- Project Budget/Cost Table (as of June 30, 2013)

	FFGA			MTA's Current Baseline Budget (CBB)		Expenditures	
	(Millions)	(% of Grand Total Cost)	Obligated (Millions)	(Millions)	(% of Grand Total Cost)	(Millions)	(% of CBB)
Grand Total Cost	\$7,386	100		\$9,824**	100	\$5,131.3	52.2
Financing Cost	\$1,036	14.0		\$1,116		617.6	55.3
Total Project Cost	\$6,350	86.0	\$4,107	\$8,708*	88.3	\$4,513.7	51.8
Federal Share	\$2,683	36.3	\$1,148	\$2,699	30.6	\$1,890.2	21.7
5309 New Starts share	\$2,632	35.6	\$1,098	\$2,436.6	27.6	\$1,632.7	18.7
Non New Starts grants	\$51	0.7	\$50	\$67	0.8	\$62.1	0.7
ARRA	0	0	0	\$195.4	2.2	195.4	2.2
Local Share	\$3,667	49.6	\$2,959	\$6,009	57.7	\$2,623.5	30.1

* CBB represents current MTA Board approved \$8,245 million budget plus \$463 million for Rolling Stock Reserve (regional investment not included).

**This total does not include Regional Investment amount of \$590,732,003.

Table 2 – Summary of Critical Dates

	FFGA	Forecast (F) Completion, Actual (A) Start	
		Grantee*	FTA**
Begin Construction	September 2001	September 2001(A)	September 2001(A)
Construction Complete	December 2013	August 2019	September 2019
Revenue Service	December 2013	August 2019	September 2019

* Source – Grantee forecast Revenue Operations Date per information presented to MTA CPOC on May 21, 2012

**Source –Based on PMOC 2012 risk assessment results.

Table 3 – Comparison of Standard Cost Categories: FFGA vs. CBB

Standard Cost Category (SCC) No.	FFGA SCC baseline (YOE \$) M	July 2, 2012 Re-baseline (YOE \$)	May 2013 SSC (YOE \$) M	June 2013 SSC (YOE \$) M	June 2013 % of Rebaseline	May'13 to June '13 Change \$M	CBB Variance from FFGA %
10	1,989	2,943	3,091	3,073	104.42%	-18	54.50%
20	1,169	1,514	1,331	1,366	90.22%	35	16.85%
30	356	388	389	393	101.29%	4	10.39%
40	205	488	522	522	106.97%	0	154.63%
50	619	698	698	677	96.99%	-21	9.37%
60	165	204	204	204	100.00%	0	23.64%
70	494	674	674	674	100.00%	0	-29.57%
80	1,184	1,649	1,649	1,649	100.00%	0	39.27%
90	169	150	150	150	100.00%	0	-11.24%
Subtotal	6,340	8,708**	8,708	8,708	100.00%	0	27.81%
100	1,036	1,116	1,116	1,116	100.00%	0	7.72%
Total Project Cost (10 – 100)	7,386	9,824*	9,824	9,824	100.00%	0	25.16%

*This total amount does not include Regional Investment amount of \$590,732,003.

**Rolling Stock Reserve is included in the Total Value under SCC # 70

Changes to SCC Codes:

SCC Code #10

Mud slabs transfer from CM012 to CM009

Tunnel A and B10 fire standpipe transfer from CS179 to CQ032

Tunnel rehab and bench transfer from CS179 to CM012 and CQ032

SCC Code #20

Mud slabs transfer from CM012 to CM009

Tunnel rehab and bench transfer from CS179 to CM012 and CQ032

Early concourse work transfer from CM014B to CM014A

SCC Code #30

Tunnel A and B10 fire standpipe transfer from CS179 to CQ032

Tunnel rehab and bench transfer from CS179 to CM012 and CQ032

SCC Code #50

Tunnel A and B10 fire standpipe transfer from CS179 to CQ032

Tunnel rehab and bench transfer from CS179 to CM012 and CQ032

Table 4 -- Core Accountability Items -- July 2013

Project Status:		Original at FFGA	Current*	ELPEP **
Cost	Cost Estimate	\$7.386B	\$9.824B	\$8.119B
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Schedule	Revenue Service Date	December 31, 2013	September 2019	April 30, 2018
Total Project Percent Complete	Based on Expenditures	56.5 ***		
	Based on Earned Value	NA		
Major Issue		Status	Comments	
Impact of CM012R solicitation cancellation, scope repackaging and re-bidding.		Scope from cancelled CM012R (Manhattan Structures 2) solicitation is being split among existing and three new contract packages. Work from CM012R replacement packages are on the project critical path. First new contract package (CM005) was advertised on March 21, 2013 and bids were received on June 20, 2013.	Results of this procurement have a major impact on project cost and schedule baseline. The PMT is currently working on developing the remaining contract package (CM007). Impact on project cost and schedule contingency remains TBD.	
Major Procurements Delays		Procurement of CS179 (Systems Package 1) continues to slip. MTACC did not meet its goals of having a recommendation to award presented at the July 2013 MTA Board Meeting. Other System Packages (CS284, CS084, and VS086) procurement dates are now TBD. The CM006 package was supposed to be advertised on July 1, 2013, but this date was also not met. Advertise date for the CM007 package remains TBD.	CS179 is on the project critical path (since Jan. 1, 2013) and current delay will impact project schedule contingency. CM006 and CM007 are also critical path Contracts.	
Project Schedule		Project IPS has not been completely updated since October 2012. ESA stated in its June	Until the IPS is fully updated with proper logical ties, it is not possible to properly assess the	

	2013 Quarterly Progress report that it is in the middle of re-planning the project baseline and will not have a new baseline for review until at least mid-September 2013.	viability of the current baseline schedule.
Amtrak Integrated Master Schedule	Develop an integrated master schedule that will lay out the upcoming Amtrak projects (Moynihan, ERT Track Rehab., Brookfield, etc.) and overlay the ESA work at Harold. The ESA Risk Manager stated that he received a schedule through the end of 2013 for Moynihan project.	This issue has been outstanding since MTACC committed to producing the Integrated Master schedule in June 2012. An ESA staff member is coordinating this activity on a part-time basis until a dedicated scheduler is hired; however progress in producing this schedule has been meager.
Next Quarterly Meeting:	September 2013 (tentative)	

* Note that \$9.824B (finance included) and the September 2019 RSD are the MTA cost and schedule baselines approved in May 2012.

** 2010 Enterprise Level Project Execution Plan (ELPEP) reflecting medium level of risk mitigation, excluding financing cost of \$6,116 million. ELPEP is to be updated.

*** Expenditure percentage based on dividing ESA "Current Baseline Budget" figure by "Invoiced" figure excluding Rolling Stock Reserve.