PMOC MONTHLY REPORT

East Side Access (MTACC-ESA) Project

Metropolitan Transportation Authority New York, New York

Report Period November 1 to November 30, 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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November 2013 Monthly Report

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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. 007. 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.

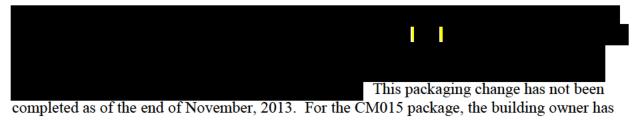
MONITORING REPORT

1.0 PROJECT STATUS

a. Design

As of October 31, 2013, MTACC reported that the Engineering/Design effort was 97.3% complete in the ESA October '13 Monthly Progress Report (the September Report showed 97.8%); however, the Cost Report shows only 94.4% complete on a cost invoiced basis. The percent complete varies monthly depending on the award of tasks to the General Engineering Consultant (GEC).

The Project Management Team (PMT) received Amtrak approval to submit the 90% Harold Stage 4 Catenary design package (FHA04) on November 7, 2013. This package was forwarded to Amtrak for review on November 15, 2013. The PMT is awaiting Amtrak comments.



requested time to review redevelopment options for restructuring his building. A meeting is scheduled for the first week of December 2013 with senior management from both sides to discuss the 48th Street entrance.



The 90% submittal for CH058 (Harold Structures - Part 3b) remains on hold as a result of the PMT rethinking both 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). as well as other scope shifts itemized above. The method of constructing the Eastbound Reroute tunnel will be changed from a jacked shield method to a "top-down" approach (that will provide a slab under the tracks) to make better use of available extended track outages in the summers of 2015 and 2016.

The GEC completed the discussion materials for the cast in place, hybrid concept, and precast design options for CM007 in early November, 2013. A Request for Expressions of Interest (RFEI) was advertised on November 18, 2013. Expressions of Interest are due on December 17, 2013. Meetings with interested parties will be held in early January, 2014. The 100% design submission by the GEC is scheduled for end of March 2014.

Completion of the specifications and drawings for the stand-alone Track and Signal Installation Contract package (CS284) was achieved in October 2013 (previously forecast for September 30, 2013). Contract documents remain under development. Technical drawings and specifications for the Traction Power Contract Package (CS084) were completed in September 2013, however work on the Contract documents continues.

b. Procurement

As of the end of October 2013, the total procurement activity on the project was 62.2% complete against the \$8.708B budget. There have been \$5.416 billion in contracts awarded to date. The PMT's calculations on procurement are done against the \$8.245B budget, without the Rolling Stock Reserve.

The CM006 (Northern Structures) was advertised on August 15, 2013 (with Contract documents available on August 26, 2013). Initial proposal due date was October 17, 2013, however this date was extended twice to November 15, 2013. Proposals were received on that date and are currently under evaluation. The anticipated award date is still forecast for March 2014.

The CM007 (Caverns) Contract Package remains under development. The advertise date for this package is forecast for March 2014. ESA has stated that although the award decision should be

made by the end of December 2014, due to lack of available funding a Limited NTP for procurement of pre-cast can be issued July 1, 2015 with the Full NTP not issued until April 7, 2016.

Awarding the CS179 (Systems Package 1) contract continues to slip. The ESA PMT issued addendum #35 in November 2013 that restructured the contract package to include a base contract and six options. This was done because of funding constraints. This change will significantly complicate the procurement, and the PMOC believes that this will delay award of the contract. The latest round of Best and Final Offers (BAFOs) for the revised contract package was due on November 20, 2013. This date has now been revised to December 11, 2013. ESA missed its last forecast of having a recommendation to award to present at the November 2013 MTA Board meeting. The PMOC does not believe that this contract can be awarded at this point in 2013.

As stated above, the PMT has decided to split the Tunnel Systems package (CS284) into two packages: one for track work and signals (which will remain CS284), and one for the traction power work (CS084). Advertise date (RFP) for CS084 is forecast for January 14, 2015; procurement dates for CS284 remain TBD. This package split will have an impact on the Systems Package 1 (CS179) Contractor, who is responsible for systems integration for these packages.

An Industry Outreach was held November 1, 2013 to familiarize the bidding community with CM014B package. Advertising of CM014B is anticipated for mid-January 2014, with an award anticipated for July 1, 2014.

A notice of award Notice to Proceed (NTP) for a limited scope of work was issued for CH057A on November 21, 2013 (previously forecast for October 2013). Full NTP is anticipated for January/February 2014, pending resolution of funding issues with Amtrak and the FRA for the High Speed Rail (HSR) portion of the work.

NTP for remaining work in the CH057 package is forecast for August 2014.

c. Construction

The PMT reported in its October 2013 Quarterly Progress Report that the actual construction progress was 54.6% vs. 57.6% planned. Over the last several months, progress has only been proceeding at about half the rate as projected.

Manhattan: CM009 – Manhattan Tunnels Excavation/Structures Part 1: Substantial Completion for CM009 was achieved on September 30, 2013, after which the contractor demobilized and vacated the project site. Although some commercial administration remains, construction on the contract is complete.

Construction Progress:

CM013 – 50th Street Vent Facility: MTACC reports that through October 31, 2013, the EAC has increased to \$125.23 from the previous \$124.97 million. Forecast Substantial Completion date remains December 31, 2013. As of October 31, 2013, the actual percent complete was 89.7% vs. 90.6% planned. The substantial completion dates for the 2nd floor roofing, Loading Dock roofing and Utility Chase cladding has been extended to the Final Completion (March 1,

2014). This schedule change was required because there had to be modifications to the Utility Chase framing to properly align the new utility chase cladding with the existing building (300 Park) cladding joints from work performed by a separate contractor. The cladding of the utility chase resumed and is ongoing.

<u>Construction Progress</u>: Stair #1 erection to the upper floors and roofs is near complete and has also extended to its entry point at the ground floor Public Plaza. Concrete block wall erection is substantially complete around the building perimeter and in the interior areas of the building. Painting of concrete block throughout continues.

Exterior building cladding continues. Loading Dock parapet cladding is complete. Utility work and backfilling is complete and sidewalk restoration is near complete on E. 50th Street. Waterproofing and overall progress in the Public Plaza is ongoing.

Scope transfer work from the upcoming CM014-B contract was completed. This work encompassed construction of the below grade framed steel structure for the street ADA elevator for the upcoming new 48th Street Entrance into the Concourse and includes the surface temporary "knockout panel" in the 280 Park Plaza.

CM013A – 55th Street Vent Facility: MTACC reports that through October 31, 2013 the EAC was \$58.56 million. Forecast Substantial Completion date remains March 14, 2015. As of October 31, 2013, MTACC reports that the actual percent complete remained slightly ahead of schedule at 23.4% vs.20.5% planned.

<u>Construction Progress</u>: The facility for Laborer's Union 147 (Sandhogs) has been erected on East 56th Street. Blasting in the plenum was completed and rock bolting and shotcreting is ongoing at the plenum walls. Preparations are underway to begin rock excavation for the shaft. The primary issue on the project is to develop an approved "Hole-Through Plan" to be used as procedures when the shaft excavation breaks through the top of the 55th Street Cavern, which is the mined out area north of the Public Cavern. The break through is forecast for early January 2014. The MTACC and GEC are reviewing the contractor's resubmitted plan.

CM004 – 44th Street Building Demolition and Fan Plant Structure; 245 Park Avenue Entrance: MTACC reports that through October 31, 2013 the EAC is \$55.38 million. The Forecast Substantial Completion date for the CM004 contract remains January 31, 2014. Beneficial Use for the 245 Park Entrance was achieved October 21, 2013. The actual percent complete is 89.4% versus 97.9% planned.

<u>Construction Progress</u>: The contractor continued with erection of the limestone building facing. Roof installation is complete. The runway installation for the re-installation of the Gantry Crane is complete and the gantry is scheduled to be installed in early December 2013. The permanent stair was completed to the 3rd floor. There will be a temporary access stair from the 2nd floor to ground floor while the Gantry Crane remains in the building and the stair will be completed in the CM014-B contract. Completion of street utility work in East 44th Street, below grade steel and shaft punch list work is temporarily delayed pending installation of the crane.

CM014A– Concourse and Facilities Fit-Out: MTACC reports that through October 31, 2013, the EAC is \$55.58 million. Forecast Substantial Completion date continues to be April 1, 2014. The actual substantial completion date cannot be determined at this time until the delay due to

SCADA system redesign has been established and negotiations for time extension are finalized for the proposed additional scope to this contract to perform early CM014B work.

The actual current percent complete reported is 53.6% versus 98.8% planned. This large gap between percent complete versus planned continues to be largely attributed to the Supervisory Control and Data Acquisition (SCADA) system redesign (based on LIRR requirements), which resulted in a hold being placed on fabrication and delivery of all power system equipment until the redesign was complete.

<u>Construction Progress</u>: The six Transformers and two Unit Substations have been delivered and set in place. Protective plywood enclosures have been erected around the equipment. The Switchgear and SCADA equipment are in various stages of fabrication, testing and delivery. Work continued with ductwork installation and placement of Air Handling Units.

The temporary access ramp has been relocated at the south end of the Concourse as a part of the scope transfer work to this contract for early CM014-B work. Block wall erection, door frames and branch feeder conduit installation continued.

CM005- Manhattan South Structures: The contractor was given Notice to Proceed on September 9, 2013. MTACC reports that the Estimate at Completion (EAC) is \$225.75 million. Forecast Substantial Completion date is set for February 6, 2016. Actual construction progress for October 2013 was 2.0% versus 1.5% planned. Cumulative progress through October 31, 2013 was 4.2% actual versus 3.5% planned. As of mid-November 2013, the CM005 contractor continued to develop resource and cost loading of the baseline CPM Schedule, the schedule logic has been accepted.

<u>Construction Progress</u>: The contractor continued to mobilize and prepare submittals. Site handover and takeover inspections continued. Weep hole drilling of slabs also continued. The contractor continued the removal of bolts in the eastbound cavern in preparation for smoothing shotcrete and waterproofing installation. Material and equipment deliveries continued.

<u>**Queens</u>: CQ031 – Queens Bored Tunnels and Structures**: The Estimate at Completion (EAC) for CQ031 was again reduced to \$758,715,000 as of October 31, 2013. This occurred when the MTACC decided not to include possible contract modifications or future claims in the EAC. Actual progress for October 2013 was 0.2% versus 0.0% planned (contract was planned to be finished earlier). Cumulative construction progress through October 31, 2013, was 98.9% actual versus 100.0% planned. The MTACC and the contractor continue to negotiate the commercial issues, after which, if successful, Final Completion will be declared.</u>

<u>Construction Progress</u>: The contractor continued to complete punch list construction items and demobilize during November 2013.

CQ032 – Plaza Substation and Queens Structures: The EAC for CQ032 was likewise reduced as of October 31, 2013, to \$223,758,000, as a result of the MTACC's decision to no longer include possible contract modifications or future claims in the EAC. The MTACC forecast Substantial Completion date was shortened slightly to August 7, 2015. Actual construction progress for October 2013 was 3.2% versus 3.0% planned. Cumulative progress through October 31, 2013 was 37.3% actual versus 65.4% planned. The MTACC and the CQ032 contractor continue to develop a re-baselined contract schedule which will incorporate additional work for the 63rd Street tunnel rehabilitation, work associated with design revisions in

the Early Access Chamber; and prior access delays. The MTACC does not expect that this schedule will be fully developed before the end of December 2013.

<u>Construction Progress</u>: The contractor is complete with all rehabilitation at the ventilation facilities at Roosevelt Island, Vernon Blvd., and 12th, 23rd, and 29th streets. The contractor continued to install exterior brick and interior masonry work at the B-10 Substation and has continued structural steel erection and concrete placement for the C06 Substation and tunnel approach invert slabs in the Open Cut and Q-Tip areas.

CQ039 – **Northern Boulevard Crossing**: The EAC for CQ039 remained at \$103,719,000 as of September 30, 2013 (the MTACC did not include information about the CQ039 contract in its October 2013 Monthly Report). Actual Substantial Completion (SC) was achieved on September 30, 2013, although final compensation grout behind the tunnel liner, the lone remaining construction item, had not been completed. Actual construction progress for October 2013 was 1.0% versus 0.0% planned (the project was supposed to have been completed). Cumulative progress was 96.8% actual versus 100.0% planned.

<u>Construction Progress</u>: The contractor continued to install compensation grout behind the tunnel liner.

Harold Interlocking: CH053 Contract – Harold Structures Part 1 and G.0.2 Substation: As of October 31, 2013, the Estimate at Completion (EAC) for CH053 was reduced to \$251,084,000. This occurred when the MTACC decided not to include possible contract modifications or future claims in the EAC. The forecast Substantial Completion date remains at July 17, 2014. Actual construction progress through October 2013 was 1.8% versus 0.0% planned (the contract was supposed to be complete). Cumulative progress through October 31, 2013, was 84.1% actual versus 100.0% planned.

<u>Construction Progress</u>: The contractor installed the ML4 bridge structure over the Loop Tracks at 43^{rd} St. and placed the bridge girders for the ML4 bridge at 48^{th} St. (the remainder of the bridge will be constructed in place). The contractor continued construction of the 43-S2 retaining wall and the Tunnel A Approach structure between 43^{rd} and 39^{th} St. The contractor also continued to install 12kV cables between Sub 44 and 39^{th} St.

CH054A – Harold Structures Part 2A: As of October 31, 2013, the EAC for CH054A was reduced to \$52,984,000 when the MTACC decided not to include possible contract modifications or future claims. The forecast Substantial Completion date remained at June 17, 2013. Actual construction progress for October 2013 was 3.9% versus 0.0% planned (contract was supposed to be complete). Cumulative progress through October 31, 2013, was 59.1% actual versus 100.0% planned.

<u>Construction Progress</u>: The contractor continued to construct the 43-S1 retaining wall, install 12kV duct bank and manholes between Skillman Avenue and Sub 44, and construct jacking and receiving pits for future micro-tunnel runs.

Railroad Force Account:

FHA01 – Harold Stage 1 Amtrak: As of October 31, 2013, the EAC remained at \$16,824,000. The MTACC's forecast for Substantial Completion (SC) was extended to August 7, 2014, an increase of 3 weeks. Actual construction progress for October 2013 was 0.8% versus 0.7%

planned. Cumulative progress through October 31, 2013, was 93.4% actual versus 95.1% planned.

<u>Construction Progress</u>: Amtrak Force Account Electric Traction (ET) personnel continued to relocate catenary wires and install or remove catenary structures at various locations in Harold Interlocking and support the CH053 contractor with other catenary construction.

FHA02 – Harold Stage 2 Amtrak: As of October 31, 2013, the EAC for FHA02 was reduced to \$41,683,000 when the MTACC decided not to include future Project Initiations (PIs) in the EAC. The MTACC's forecast for Substantial Completion (SC) of FHA02 was extended until March 28, 2015, an increase of 9 weeks. Actual progress for October 2013 was 4.0% versus 3.3% planned. Cumulative progress through October 31, 2013, was 73.5% actual versus 72.7% planned.

<u>Construction Progress</u>: Amtrak Force Account C&S personnel "cut over" the new "F1" Interlocking on the weekend of November 1-3, 2013. After the cutover was complete, the C&S forces began preparations for the installations and cutovers of "Loop" and "T" Interlockings, which are scheduled within the next two years.

FHA03 – Harold Stage 3 Amtrak: The EAC for FHA03 was adjusted to accommodate the actual invoiced amount as of October 31, 2013, which was \$2,113,000. Since all construction for this initial phase of FHA03 was completed in August 2013 (except for some material clean-up), the account will be de-activated until additional FHA03 scope is authorized. Actual construction progress for October 2013 was 1.0% versus 0.0% planned. Cumulative progress through October 31, 2013, was 100.0% actual versus 100.0% planned. The EAC for FHA03 will increase as additional Project Initiatives (PIs) are authorized for increased scope in the future.

<u>Construction Progress:</u> No additional construction for FHA03 was accomplished in November 2013. All work authorized by the initial PI for FHA03 was complete in August 2013.

FHL01 – Harold Stage 1 LIRR: As of October 31, 2013, the EAC for FHL01 remained at \$21,972,000. The MTACC's forecast date for Substantial Completion was extended to December 11, 2014, an additional 3 weeks. Actual construction progress for October 2013 was 1.0% versus 1.1% planned. Cumulative progress through October 31, 2013, was 76.4% actual versus 77.3% planned. Remaining FHL01 work includes installation of track turnouts, C&S installation and cutover of Point and Harold Interlockings, Traction Power relocations and cutover of the signal power line, and cable installation for the new re-located G02 Substation.

<u>Construction Progress</u>: : LIRR Traction Power personnel continued to install pull boxes, power cases, conduits, and cables on the re-located signal power line prior to the signal separation cutover.

FHL02 – Harold Stage 2 LIRR: The EAC for FHL02 was decreased during October 2013 to \$66,274,000, due to the MTACC's decision not to include possible Memoranda of Understandings (MOUs). Actual construction progress for October 2013 was 0.6% versus 3.2% planned. Cumulative progress through October 31, 2013, was 30.0% actual versus 34.6% planned. Remaining FHL02 construction includes installation of 15 track turnouts, installation of 6 Central Instrument Locations (CILs) in Harold Interlocking, installation of new third rail for additional tracks that will be constructed, and the installation of a new motor-generator (MG) set for the signal power separation.

<u>Construction Progress</u>: LIRR Signal personnel continued to make circuit revisions and pre-test for the Point Interlocking cutover, which has been postponed until early February 2014. Signal personnel also continued to install cables for the "H4" location in Harold Interlocking.

FHL03 – Harold Stage 3 LIRR: The EAC for FHL03 was established at \$2,559,000 during October 2013, which is the total amount invoiced by LIRR to date. This was for the Line 2 and Line 4 construction that the LIRR did during the summer track outage in July and August 2013. The work was completed in August 2013 and, except for some material clean-up, has since been de-activated. Additional work will be authorized by a future MOU and FHL03 will be re-activated. Actual construction progress for October 2013 was 2.0% versus 0.0% planned. Cumulative progress as of October 31, 2013, was 100.0% actual versus 100.0% planned.

<u>Construction Progress</u>: No additional construction for FHL03 was accomplished during November 2013. All work authorized by the initial MOU for FHL03 was completed in August 2013.

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

ESA Project Quality Manual (PQM): The ESA Quality Manager had initially committed to update Revision 6 of the ESA Project Quality Manual (PQM) that was issued in February 2009 by the end of February 2013. Each month this date continues to slip. A Draft of Revision 7 has been prepared and is being reviewed by MTACC's Chief of Quality, Safety, and Security who was scheduled to meet with the ESA Quality Manager in mid-July 2013 to finalize it. The latest date provided to the PMOC for rescheduling this meeting, November 15, 2013, was not met. The ESA Quality Manager is now expected to provide a copy of Rev. 7 to the PMOC by the middle of December 2013.

Submission of As-Builts: The single construction contractor working on the CH053, CH054A, and CQ032 contracts continues to be late in submitting As-Built drawings. The contractor started to submit a limited number of As-Builts but they are not in the correct format. As a result, the GEC had to convert the files, a task that is not in their scope. Additionally, the As-Builts submitted are not up to date. At the monthly ESA Quality Staff Meeting held on October 31, 2013, the ESA Quality Manager, MTACC's Chief of Quality, Safety, and Security, and Deputy Executives from the ESA Project agreed to meet and develop a plan of action in December 2013.

<u>CM005 Quality</u>: Submittals from the new Quality Manager for the CM005 Contractor have many errors and omissions. The ESA Quality and CM005 Construction Managers met with the Contractor who committed to improve the submittals, and ESA Quality will conduct a workshop for Construction Work Plans (CWPs) with the contractor in mid-December 2013.

2.0 SCHEDULE DATA

ESA continues to provide minimum information about the project schedule and has not provided an updated IPS or variance report as of the end of November 2013. The only schedule-related submittal received during this reporting period was the Contract Status Summary Report (CSSR) for future contracts. ESA states in its October 2013 Monthly Progress report that it continues its program review of the IPS. The PMOC continues to note that ESA's failure to provide schedule forecasts or updates during the last several months constitutes a violation of requirements set forth in its SMP. It also makes the task of reliable projections of the current and future status of the Project very unreliable. It may not be until ESA submits its Re-Plan to the FTA that any substantive view is provided of their IPS.

Project Critical Path: ESA's 2012 baseline schedule critical path went through Contracts CM012R (42 months), then a portion of Contract CS179 (only 8 months of total Contract duration), then IST (15 months), and finally through LIRR IST (3 months). The PMOC believes that the new critical path will have the same structure, with CM005, CM006, and CM007 replacing CM012R; however, the current project critical path cannot be determined until ESA provides a fully updated and linked Integrated Project Schedule. The PMT had committed to provide a draft of the revised schedule by mid-September 2013, but has not met this commitment.

<u>Schedule Contingency</u>: Schedule contingency must be developed as part of the program rebaselining effort. Schedule contingency cannot be developed until a new RSD is established.

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 stated in April 2013 that it would review any project budget changes resulting from the new packaging plan for CM012R and compare it to funding availability in the current MTA Capital Plan. Results of this comparison were to be discussed internally with the MTA Board in July 2013; however, as of this report, there has been no indication that this discussion occurred or that there was any tentative date scheduled for presentation of a new Budget Re-Plan, although on a strictly informal basis the ESA PMT has suggested they hope to submit a Re-Plan by the end of 1Q2014.

Budget/Cost: The ESA October 2013 Progress Report shows total project progress was 58.4% vs. 61.7% planned, against the Current Baseline Budget (CBB) and the construction progress as 54.6% vs. 57.6% planned, based on invoiced amount. The total project progress over the preceding month was at less than 25% of the planned rate of progress.

As of October 31, 2013, the CBB remains at the baseline value of \$8.708 billion, with changes of greater than \$30M in SCCs 10 and 50. According to ESA the changes were caused principally Traction Power being moved from CS284 to CS084 and due the transfer of funding for CQ033 to Contingency. In a proper allocation of SCCs the package for bid of Traction Power should have no effect on its SCC, and funding being moved from a package to Construction Contingency should increase SCC 90, but there was no change there. The PMOC has recommended that ESA re-evaluate its SCC structure going forward to avoid such discrepancies.

In October 2012, the low bid for CM012R was rejected as too high. Since that time, CM012R has been re-packaged; however, the PMT has not adjusted the original budget for this work.

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ESA noted that funding for CQ033 and CM007 will be requested in the 2015-2019

Capital Plan). ESA PMT continues to maintain the \$8.708B project budget, but does not show a probable cost increase.



The PMT has stated that it cannot make any adjustments to the Budget without approval by MTACC Senior Management. The PMT has indicated it is re-planning the Project Cost and Schedule, but has missed its mid-September 2013 forecast date for the Schedule, and cost results are now not expected before the end of 1Q2014.

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.

Contingency:

noted above, this is simply budgeted contingency and in no way reflects the actual increase in costs or higher than budgeted contract estimates or bids, given that most probably between \$600-650M of scope has been ignored in the calculations.

<u>Change Orders/Budget Adjustments</u>: The PMT reported that during October 2013, there were four (4) change orders executed over \$100K, with a net value of \$25.9M, including a single change order for transferred scope (rehabilitation of east bound 63rd street tunnel) of \$25.6M.

4.0 RISK MANAGEMENT

The PMT has acknowledged that fiscal constraints have altered the schedule of the project. The change of the CS179 Contract Package structure (to a base contract with six options) will have a significant impact on the remainder of the ESA Program. The previous assumption of 65 month duration for the CS179 Package is now questionable, as is the estimated total cost of the Contract. The PMOC believes that this change in the Contract structure could significantly increase the cost of the CS179 Package. The Proposers will have to re-evaluate their pricing strategies in light of the options. Additionally, interfacing with other Systems packages (VS086, CS084, and CS284) will become more complicated (note: ESA does not appear to have addressed this issue based on information provided to the PMOC to date). Funding availability has now become a significant risk factor for this Contract, and the ESA PMT has stated that at present there is only enough funding available to award the base contract. Similarly, the procurement of CM007 has been pushed out due to funding constraints; with a partial NTP forecast for July 2015 and full NTP in April, 2016, contingent upon funding availability. These constraints have resulted in a total duration of 69 months for CM005; CM006; and CM007.

As

The PMT is currently not planning to perform a programmatic risk assessment until sometime in early 2014, if at all. Project cost and schedule contingency levels are generally determined on the basis of the risk assessment results. The PMOC is concerned that ESA may develop cost and schedule contingency levels that do not adequately take into account the new project risk profile that will emerge from the revised cost and schedule baselines.

Minimal progress has been made on producing an Integrated Master Schedule which overlays the Harold work schedule on an Amtrak Program of Projects that may compete for limited resources. Amtrak provided a schedule data for the Moynihan project last summer, however, the ESA PMT has yet to develop the framework for the revised Integrated Master Schedule. The ESA Risk Manager stated at the Harold re-planning workshop on November 25, 2013 that since Amtrak only plans its work a few months at a time, producing the Integrated Master Schedule will be difficult or impossible to achieve

The PMT experienced the loss of some key senior management staff within the last few months which places extra demands on current staff to meet the project needs. The PMOC believes that the vacancy in key staff positions creates a risk to the Technical Capacity and Capability of the PMT and the ESA project. While two key positions have been filled, there are still two key positions open: Operational Readiness Program Manager and Rail Systems Program Manager.

There is a continuing difficulty in adhering to a schedule for a Monthly Risk Review Meeting. The PMT initially committed to holding Monthly Risk Review Meetings but has not achieved this schedule. The last Risk Review meeting was held on July 31, 2013 and none have been scheduled for the future.

5.0 ELPEP COMPLIANCE SUMMARY

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

- Technical Capacity and Capability (TCC): The PMOC has completed its review of the draft PMP Revision 9.0 and incorporated the FTA comments in September 2013. Regarding PMP training. The PMOC was advised that MTACC has completed its audits to establish where training efforts need to be focused. The audit report was provided to the FTA and the PMOC in September 2013. MTACC began full-scale procedures training for its project management personnel during 3Q2013 (discussed in the QA/QC section above). MTACC unilaterally issued a subsequent revision to the TCC Plan in September 2013. The PMOC completed its review of the September 2013 update, consolidated all comments and forwarded the final draft comments to the FTA in November 2012. The PMOC previously noted that a TCC review might be warranted given the recent significant personnel changes to many key upper management level positions.
- Continuing ELPEP Compliance: The following ELPEP components continue to need improvement or are deficient: Management Decision; Design Development; CCC Process and Results; Stakeholder Management; Issues Management; Procurement; Timely Decision Making; Risk-Informed Decision Making.

The PMOC notes that the ESA project continues to be non-compliant with ELPEP, and is not meeting some of the more important requirements of the SMP and CMP sub-plans to the PMP.

The PMOC transmitted the details of ELPEP non-compliance on the ESA Project to MTACC on October 30, 2013. 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 cost, schedule and contingency impacts of the CM012R bids over budget event and subsequent cancellation of the procurement 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: The ESA project is non-compliant with requirements for IPS Updating, Forecasting, and Schedule Contingency Management.
- **Cost Management Plan**: The ESA project 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 the FTA and the PMOC with its 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 agreement on how to proceed without the revised ESA cost and schedule baselines, which are needed to provide a comprehensive revision to the ELPEP document. As of November 30, 2013, MTACC has still not issued the new revised cost and schedule baselines.

The next ELPEP Quarterly Review Meeting with MTACC, FTA-RII, SAS and ESA projects and the PMOC is scheduled for December 12, 2013.

6.0 SAFETY AND SECURITY

Project safety statistics for lost time accidents continue to trend slightly above the Bureau of Labor Statistics (BLS) national average at 2.22 vs. 2.00 lost time accidents per 200,000 hours. There has been continuing improvement in the overall project safety statistics and currently there are two contracts that are trending above the average for the project. For the CM004 Contract, the lost time accidents are trending above the ESA Project average (2.85 vs. 2.22 lost time accidents per 200,000 hours). On the CQ031 Contract, the lost time accident statistics are trending above the ESA Project average (2.6 vs. 2.22 lost time accidents per 200,000 hours), although this contract will be substantially complete shortly. ESA did not report any significant security issues for the October 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. The level of effort for the GEC will increase significantly given the development of the CM007 Contract Package and the scope shifts being considered for the remaining Harold Contract Packages. The PMOC continues to recommend that the PMT develop a tracking sheet with firm dates for interim milestones as a tool to augment the design management process.

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 Project 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.

Proposals for the CM006 (northern structures) package were received on November 15, 2013. The PMOC is forecasting NTP for this contract by March 3, 2014. Based on ESA's past history in amount of time needed to negotiate and award an RFP, the PMOC believes that this date may not be achievable. 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 major concern.

The PMOC believes that the change in the CS179 Contract structure (base contract plus six options) could significantly increase the cost of the CS179 Package. The Proposers will have to re-evaluate their pricing strategies in light of the options. This change will also delay the award of the base contract. The latest BAFO due date of November 20, 2013 has already been extended to December 6, 2013, and may be extended further, thus pushing a potential award date into the early part of 2014 at the earliest.

The PMOC also remains seriously concerned about the continuing delays to other significant procurements, namely: CS284 (Tunnel Systems which has now been split into two packages); VS086 (Signal Equipment) and CM014B (GCT Concourse and Fit-out).

<u>Contract CM014A</u>: Forecast Substantial Completion date continues to be April 1, 2014. The actual substantial completion date cannot be determined at this time until the delay due to SCADA system redesign has been established and negotiations for time extension are finalized for the proposed additional scope to this contract to perform early CM014B work.

<u>Contract CM013</u>: Through November 30, 2013, the stop work order issued by the MTACC Code Compliance Unit (CCU) for the application of Pneumatically Applied Concrete (PAC) continued to be partially lifted. The contractor completed the mockup and core samples were taken after 28 days cure. Full release of the order is pending successful inspection by CCU of the samples. During November 2013 another Stop-Work-Order was issued by the CCU for the scaffolding in the shaft used to apply the spray-on acoustical lining. The Contractor is submitting revised calculations for the scaffold for review and approval. The PMOC is concerned that the stop-work-orders may impact upcoming substantial completion date. The PMOC will continue to observe the closure of this issue and any impact it may have on the forecast date for Substantial Completion.

Contract CQ032: The PMOC remains concerned about the gap between actual construction progress and planned progress for CQ032. Although the trend at first slowed and has begun to reverse itself in recent months, the gap is still significant, 28.1%, as of October 31, 2013. The PMOC is aware that the MTACC and the contractor have been developing a recovery schedule that will address the construction gap issue along with a recent re-design issue in the Early Access Chamber, but this re-baseline will not be available until the end of December 2013, at the earliest. The PMOC recommends that the parties focus additional attention on the re-baseline effort to expedite its development and then follow it explicitly to recover project schedule.

Contract CQ039: The ground thaw that the CQ039 contractor had been waiting for was finally achieved in late October 2013 and the contractor began to apply compensation grout behind the tunnel liner, which continued throughout November 2013. The grout application will continue into December 2013, after which several commercial issues and the Code Compliance violation regarding pneumatically applied concrete (PAC) will remain until Final Completion (FC) can be achieved. The PMOC recommends that the MTACC expedite negotiations for the commercial issues and either develop its position or seek a waiver from the New York State building code for the PAC issue.

<u>Contracts CH053/54A</u>: The PMOC is concerned that the potential for increased cost and further construction delays remains although both have been stable for the last 2 to 3 months based on this contract's historical progress. The PMOC has re-adjusted its forecast for Substantial Completion and now agrees with the MTACC estimate of early 3Q2014. In order to avoid further schedule slippage, however, the PMOC recommends that the PMT place a priority on Force Account support for the CH053/CH054A contractor (Amtrak and LIRR supply fixed amounts of support for all ESA contracts. The ESA PMT is responsible to decide how that support is allocated among all its contracts).

Railroad Force Account: During November 2013, Amtrak completed the cutover of "F1" Interlocking and the LIRR continued to prepare for the cutover of Point Interlocking, which was scheduled for early December 2013. The PMOC is concerned that a software issue was discovered during November 2013, which will postpone the Point Interlocking cutover until early 2014. Upon analysis, the delay will not cause any major disruption to the project schedule, although it concerns the PMOC that the project will not be completed on the schedule that was planned. In retrospect, all other Force Account construction that was planned for 2013 was accomplished relatively on schedule, largely due to the parties' continued efforts to coordinate their respective work tasks. The PMOC therefore recommends that the parties continue to work together to identify ways to accelerate the project schedule when possible and to take advantage of track outage opportunities as they present themselves.

Project Funding/Budget: The PMOC remains concerned about the results of the CM012R bid cancellation and its impact on the project budget. The PMOC has long stated, and ESA has recently confirmed, that the cost overrun on the cancelled CM012R solicitation has left the ESA Project with a budget shortfall, which will impact the project's ability to mitigate future cost increases, and will also impact the ability to make timely awards of future contract packages, as is illustrated in ESA schedule for the CM007 award that will be delayed by 6 months in order to issue a limited NTP for Procurement of pre-cast concrete panels in July 2015, and the Full NTP will be delayed an additional 9 months until April, 2016 when funding is expected to be available. This is also illustrated by the fact that the CS179 contract package was split into a base contract with six options, due to funding constraints. The PMT has acknowledged that has currently identified funding for only the base contract. The PMOC believes that this restructuring of the CS179 contract could result in a much higher cost than ESA had budgeted for, and it also may face problems of inadequate available funding to award the options

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, as required in its Cost Management Plan (CMP).

Project Schedule: The PMT did not provide a draft baseline schedule in mid-September 2013 as committed to in the July 2013 FTA/MTACC Executive Meeting. As of the end of November 2013, the following schedule items need to be addressed before a viable baseline schedule can be produced:

- CM007 "top down" schedule needs to be fleshed out and finalized.
- Integrated Systems Testing duration must be re-defined based on the change to the CS179 Contract Package Structure, and tied to the Manhattan Contracts schedules.
- Schedule for CM014B has to be produced.
- New Harold schedule has to be tied into the IPS.
- New project wide contingency has to be established.
- A new RSD must be determined.

As stated above in this report, the PMT remains non-compliant with requirements set forth in its SMP.

<u>Risk Management</u>: The PMOC remains concerned about the "coordination risk" retained by MTACC on the completion of the work in Manhattan, especially with regard to the construction and testing interface management for the systems work. When combined with the extensive scoping re-configuration changes anticipated for the Harold Interlocking work, the PMOC believes that this will create significant changes to the overall project risk profile and, as a result, the need for a comprehensive programmatic risk assessment.

Funding availability has now become a major risk on the ESA project. The PMT announced that it cannot award the CM007 contract until at least July 2015 with a limited NTP (full NTP cannot be granted until April 2016) due to budget constraints. The restructuring of the CS179 Package will have a significant impact on the entire ESA Program (in terms of both cost and schedule). Splitting this Contract into a base contract with six options (based predominately on access restraints imposed by the CM005; CM006; CM007; and CM014B packages) will significantly increase the interface risks. Schedule risks will be exacerbated if funding is not in place to award the options as planned. In addition, restructuring of the CS179 Package will continue to delay award of the contract, since the restructuring of the package will require a significant effort on the part of the proposers to submit new cost and schedules for the revised package.

The PMOC remains concerned that MTACC has not committed to performing a programmatic risk assessment once the new cost and schedule baselines are completed. The PMOC considers this an essential component in establishing the required cost and schedule contingency going forward. Lastly, the PMOC is concerned that the PMT is no longer holding the monthly Risk Review meetings as required by the RMP.

APPENDIX A -- LIST OF ACRONYMS

AFI	Allowance for Indeterminates
ARRA	American Recovery and Reinvestment Act
BA	Budget Adjustment
CBB	Current Baseline Budget
C&S	Communication and Signals
CCC	Change Control Committee
CCM	Consultant Construction Manager
СМ	ESA Construction Manager assigned to each contract
CMP	Cost Management Plan
CPOC	Capital Program Oversight Committee
CR	Candidate Revision
CSSR	Contact Status Summary Report
CIL	Central Instrument Location
CPRB	Capital Program Review Board
CPP	Contract Packaging Plan
DCB	Detailed Cost Breakdown
ELPEP	Enterprise Level Project Execution Plan
EPC	Engineering-Procurement-Construction
ERT	East River Tunnel
ESA	East Side Access
ET	Electric Traction
FA	Force Account
FAMP	Force Account Management Plan
FHACS	"F" Harold Alternate Control System
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
GCT	Grand Central Terminal
GEC	General Engineering Consultant
HTSCS	Harold Tower Supervisory Control System
IEC	Independent Engineering Consultant (to MTA)
IFB	Invitation for Bid

IPS	Integrated Project Schedule
IST	Integrated System Testing
LIRR	Long Island Rail Road
MNR	Metro-North Railroad
MTA	Metropolitan Transportation Authority
MTACC	Metropolitan Transportation Authority Capital Construction
N/A	Not Applicable
NTP	Notice-to-Proceed
NYAR	New York and Atlantic Railroad
NYCDEP	New York City Department of Environmental Protection
NYCDOB	New York City Department of Buildings
NYCT	New York City Transit
NYSPTSB	New York State Public Transportation Safety Board
OCO	Office of Construction Oversight (MTA)
PE	Preliminary Engineering
PEP	Project Execution Plan
PMOC	Project Management Oversight Contractor (Urban Engineers)
PMP	Project Management Plan
PMT	Project Management Team
PQM	Project Quality Manual
PWE	Project Working Estimate
QA	Quality Assurance
RAMP	Real Estate Acquisition Management Plan
RFP	Request for Proposal
RMCP	Risk Mitigation Capacity Plan
RMP	Risk Management Plan
ROD	Revenue Operations Date
ROW	Right of Way
RSD	Revenue Service Date
SC	Substantial Completion
SCADA	Supervisory Control and Data Acquisition
SCC	Standard Cost Category

Schedule Management Plan
Safety and Security Management Plan
State Safety Oversight Agency
System Safety Program Plan
To Be Determined
Tunnel Boring Machine
Technical Capacity and Capability
Value Engineering
Work Breakdown Structure
Westbound Bypass Tunnel

APPENDIX B – TABLES

		FFGA		В	urrent Baseline Judget 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	\$5,277.70	53.72%
Financing Cost	\$1,036	14		1,116	11.36%	617.6	55.34%
Total Project Cost	\$6,350*	86	\$4,107	\$8,708*	88.64%	\$4,660.10	53.52%
Federal Share	\$2,683	36.3	\$1,148	2,699	27.47%	\$1,914.10	70.92%
5309 New Starts share	\$2,632	35.6	\$1,098	2,437	24.80%	\$1,656.60	67.99%
Non New Starts grants	\$51	0.7	\$50	67	0.68%	\$62.10	92.69%
ARRA	0	0	0	195	1.99%	195.4	100.00%
Local Share	\$3,667	49.6	\$2,959	6,009	61.17%	\$2,746.00	45.70%

Table 1- Project Budget/Cost Table (as of October 2013)

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

Table 2 - Summary of Critical Dates

	FECA	Forecast (F) Completion, Actual (A) Start				
	FFGA	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.

Standard Cost Category (SCC) No.	FFGA SCC baseline (YOE \$) M	July 2, 2012 Re-baseline (YOE \$)	September 2013 SSC (YOE \$) M	October 2013 SSC (YOE \$) M	Oct 2013 % of Rebaseline	Sept'13 to Oct '13 Change \$M	CBB Variance from FFGA %
10	1,989	2,943	3,099	3,067	99.97%	-32	54.20%
20	1,169	1,514	1410	1,411	98.02%	1	20.70%
30	356	388	332	325	100.26%	-7	-8.71%
40	205	488	513	513	106.56%	0	150.24%
50	619	698	677	715	100.00%	38	15.51%
60	165	204	204	204	100.00%	0	23.64%
70	957	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	6,813	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)	7,849	9,824*	9,824	9,824	100.00%	31	25.16%

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

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

Notes to changes in the Code: None

Project Status:				Original at F	Original at FFGA C		urrent*	ELPEP **	
Cost Cost Estimate				\$7.386B		\$9	.824B	\$8.119B	
Schedule	Reve Date	enue Servio	e	December 31, 2013 Septer		mber 2019	April 30, 2018		
Total Project Per	rcent	Based or	n Expe	nditures			58.4 ***	•	
Complete		Based or	n Earne	ed Value			NA		
Major Issue			Statu	18			Comments		
Impact of CM012R solicitation cancellation, scope repackaging and re-bidding.				(Manhattan Structures 2) solicitation was split among existing and three new contract packages. Work from CM012R replacement packages are on the project critical path. First new contract package (CM005) had an NTP for September 9, 2013. CM006 was advertised on August 15, 2013(initial projection was July 1, 2013) with original proposals due on October 31, 2013 (amended to November 15, 2013).			remains TBD since the CM012R bid overrun in October 2012.		
Major Procurements Delays			Packa MTA havin awar 2013 Other CS08 dates dates	curement of CS179 (Systems ekage 1) continues to slip. CACC did not meet its goals of ving a recommendation to ard presented at the September 13 MTA Board Meeting. her System Packages (CS284, 084, and VS086) procurement es remain TBD. Advertise e for the CM007 and CM014B ekages remains TBD.			constraints. ESA has changed the structure of the CS179 Package to include a base contract and six options. This change will further delay negotiations and award of the		

Table 4 – ESA Core Accountability Items – November 2013

Project Schedule	ESA stated in its June 2013 Quarterly Progress report that it was in the middle of re-planning the project baseline and would issue a draft baseline for review by mid-September 2013. It also stated that it would not be providing IPS updates until it has a new schedule baseline.	ESA did not release a draft revised baseline as of the end of November 2013, nor has it provided a full IPS update.
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 in Q2 2013 that he received a schedule through the end of 2013 for Moynihan project. As of the end of September 2013, the PMOC is not aware of Amtrak providing schedules for additional projects that may impact Harold.	This issue has been outstanding since MTACC committed to producing the Integrated Master schedule in June 2012. The ESA PMT stated at the November 25, 2013 Harold workshop that since Amtrak does not plan its work more than a few months in advance, development of a full Integrated Master Schedule will be difficult, if not impossible to achieve.
Next Quarterly Meeting:	TBD	

* 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 \$1,116 million. ELPEP is to be updated.

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