PMOC COMPREHENSIVE MONTHLY REPORT

East Side Access (MTACC-ESA) Project Metropolitan Transportation Authority New York, New York

Report Period September 1 to September 30, 2013



PMOC Contract No. DTFT60-09-D-00007 Task Order No. 7, Project No. DC-27-5235, Work Order No. 1

Urban Engineers of New York, P.C., 2 Penn Plaza, Suite 1103, New York, New York 10121 PMOC Lead: V. Simuoli, 212-736-9100; vrsimuoli@urbanengineers.com Length of time on project: Five years on project for Urban Engineers

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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 and quality 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

EXECUTIVE SUMMARY

1. PROJECT DESCRIPTION

The East River tunnels in Manhattan are at capacity. The ESA project is anticipated to improve LIRR tunnel capacity constraints and enable the growth of the overall. The project comprises a 3.5 mile commuter rail extension of the Long Island Rail Road (LIRR) service from Sunnyside, Queens to Grand Central Terminal (GCT), Manhattan, utilizing the existing 63rd St. Tunnel under the East River and new tunnels in Manhattan and Queens, including new power and ventilation facilities. The project includes a new 8 track terminal constructed below the existing GCT and a new surface rail yard in Queens for daytime train storage. Ridership forecast is 162,000 daily riders (27,300 new riders) in 2020. The project will provide increased capacity for the commuter rail lines of the LIRR and direct access between suburban Long Island and Queens and a new passenger terminal in Grand Central Terminal (GCT) in east Midtown Manhattan, in addition to the current connection to Penn Station in Manhattan.

2. CHANGES DURING 2nd Quarter 2013

a. Engineering/Design Progress

As of the end of August 2013, MTACC reported that the Engineering/Design effort was 97.8% complete, although on a cost invoiced basis against the budget it is 93.6%.

b. New Contract Procurements

There was one new contract (CM005) procured during 3Q2013. NTP for this Contract was issued on September 9, 2013.

c. Construction Progress

The PMT reported in its August 2013 Monthly Progress Report that the total construction progress reached 53.4% complete, however excluding Management Reserve, on a cost invoiced basis it is 54.7%, in accordance with its re-baselined budget of May 2012.

d. Continuing and Unresolved Issues

The PMOC remains seriously concerned about the results of the CM012R bid cancellation and its impact on the project budget and schedule. In previous monthly reports, the PMOC expressed concern that the ESA PMT was not reporting the project budget and schedule impacts of the CM012R bid overrun almost a year after the fact. The PMT had not adjusted its Project Working Estimate (PWE) and contingency drawdown to account for the CM012R bid overrun costs; and has stopped providing IPS updates during 3Q2013. The MTACC President and ESA Project Executive stated that the ESA project budget and schedule will not be officially updated until all of the new CM012R related packages (CM005; CM006; CM007) were finalized, and that this would most likely not happen until the end of 2013. Given the current status of the CM007 package, the PMOC believes that this forecast will be difficult to meet.

The PMOC also remains seriously concerned about delays to other significant procurements namely; Systems Package 1 (CS179) (currently in negotiations since 2Q2012); CS284 (Tunnel Systems which has now been split into two packages); and 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. MTACC had committed to making a recommendation for awarding the CS179 Contract at the July 2013 MTA Board Meeting; and that date was not met. The ESA PMT then re-forecast recommendation to award at the September 2013 MTA Board meeting, with award of the Contract following in late September/early October 2013. The PMOC was informed in August 2013 that MTACC would not have a recommendation for award in time for the September 2013 Board meeting, as the ESA team continues negotiations and has yet to select a contractor. The PMT has not provided a new forecast for NTP as of the end of September.

The PMOC notes that since 2Q2013 the ESA Project continues to be non-compliant with ELPEP contingency forecasting and also not meeting the cost and schedule forecasting and reporting requirements of the SMP and CMP sub-plans to the PMP. The PMOC considers this a serious problem, especially because MTACC has not had a functional Integrated Project Schedule (IPS) since October 2012 and has still not finalized the forecast cost impacts to the project due to the cancellation of the CM012R procurement in November 2012 and the subsequent significant delays caused by the required repackaging and re-bidding of the CM012R scope of work.

e. New Cost and Schedule Issues

The PMOC remains concerned that the ESA Project Office has not completed the estimates for the repackaged CM012R Contract almost a year after the bid overrun, and has not revised the project baseline budget to properly account for the cost of the repackaged contracts..

The PMT did not provide a draft baseline schedule in mid-September 2013 as committed to in its June 2013 Quarterly Progress Report. Given the status of the following items, the PMOC believes that a new ESA draft baseline schedule will not be produced until late in 4Q2013:

- CM007 "bottom up" schedule needs to be produced.
- Schedules for CM005; CM006; and CM007 need to be inserted into the IPS with proper logic ties.
- Systems Package 1 recommendation to award did not go to the September 2013 MTA Board as forecast and, based upon the current CM007 top down schedule, the PMT may have to re-examine the Systems Procurement due to the interfaces with this package as well as the CM005 and CM006 packages.
- The PMT has not provided procurement dates or durations for any other future packages even though these dates need to be integrated into the IPS.
- The PMT is currently re-thinking its packaging strategy and schedule going forward for future Harold Contracts that will incorporate lessons learned from previous contracts, regional commitments going forward, and available force account resources and outages. Based on discussions with the ESA design group, scope shifts among remaining packages are being planned; however, the PMOC has not received any detailed information about the Harold re-planning effort despite requesting this at the FTA/MTACC Executive Meeting held on September 19, 2013. Consequently, the PMOC does not know where this effort stands and is unable to provide any analysis or opinions regarding any new Harold work packaging strategy.

3 PROJECT STATUS SUMMARY AND PMOC ASSESSMENT

a. Grantee Technical Capacity and Capability

The ESA Project Office lost two key staff members during the month of June 2013; the Project Controls Program Manager and the Operational Readiness Program Manager. ESA also lost its Harold Program Manager, lead scheduler, and the Rail Systems Program Manager in 3Q2013. Replacements have since been hired to fill the Harold Program Manager and Project Controls Program Manager. ESA needs to re-staff the remaining open key positions as soon as possible.

b. Real Estate Acquisition

Details of the Real Estate acquisition activities pertaining to the 48th Street Entrance of GCT are provided in Section 2.6 of this report.

c. Engineering/Design

Progress for remaining design work continues to lag design milestone targets. The GEC and PMT continue to consistently miss each of its target dates for completing the remaining design activities on the project. Details are provided in Section 2.1 of this report.

d. Procurement

Several procurement activities are ongoing related to the CM012R replacement packages (CM005; CM006; CM007) and the Systems packages, and the procurement of these packages continue to be delayed. Details are provided in Section 2.2 of this report. In addition, it should be noted that the ESA PMT has not met any of its May 2012 schedule baseline dates for the four major packages that were to be procured in 2012 (CM012R; CS179; CM014B; CH057). CM012R replacement packages and CS179 are on the project critical path and needed to be awarded prior to the end of 2012, now over nine months ago, to avoid direct impact on the project schedule contingency.

e. Railroad Force Account (Support and Construction)

During 3Q2013, Amtrak and LIRR Force Account Track personnel successfully reconstructed approximately 2,000 LF of track on Line 2 and 2,000 LF on Line 4 in Harold Interlocking while the CQ031 contractor installed concrete slabs for the future Westbound Bypass Tunnel (WBY) under those tracks. Additionally, the LIRR installed 2 turnouts during the track outage for the WBY work and 3 more turnouts during September 2013. Amtrak C&S personnel continued preparations for the installation and cutover of new "F1" Interlocking, which is scheduled for the weekend of November 1-3, 2013, while LIRR C&S continued its preparations for the installation and cutover of the signal power separation system between 39th and 43rd streets, which allowed the CH053 contractor full access to construct the Tunnel A Approach Structure east of 39th St. LIRR ET continues to prepare for the cutover of the remainder of the signal power separation system (between 43rd and 48th streets), which has been delayed until late October/early November 2013. Through 3Q2013, all track and signal work that was planned for 2013 has been completed on schedule and the ET signal power separation work is slightly behind schedule.

f. Third-Party Construction

Manhattan: The CM009 contractor completed its installation of waterproofing, shotcrete application, and invert construction in the GCT3 and GCT4 Crossover and GCT5 West Wye caverns by its Milestone 9A date of September 30, 2013, as anticipated. This was contract amendment work which the MTACC added to the original CM009 contract and completed CM009's construction on the ESA contract. This will allow CM005 field construction to begin in mid-October 2013.

At CM013, the Stop Work Order placed by the MTACC Code Compliance Unit (CCU) on placement of pneumatically applied concrete for the construction of Stair #1 in the ventilation shaft was partially lifted and the work proceeded during September 2013.

On the CM014A contract, the initial components of the power system equipment are scheduled for delivery during October 2013. MTACC and the contractor continue to negotiate over their disagreement on the time impact caused by the Systems Control and Data Acquisition (SCADA) system redesign.

Queens: The CQ031 contractor completed installation of the 600 foot long concrete slabs under Amtrak/LIRR Lines 2 and 4 in Harold Interlocking on August 18, 2013 (on schedule). These slabs were installed to provide support for the tracks when a future contractor installs a "jacked box" tunnel under them during construction for the Westbound Bypass Tunnel. The contractor also continued to install secant piles for the Tunnel A Approach Structure. As of September 30, 2013, the contractor had installed 224 of the required 246 piles and expects to be complete by mid-October 2013.

The CQ032 contractor continued to make significant progress in the Open Cut (Plaza Substation) and the B-10 Substation during 3Q2013. The contractor continued to waterproof and shotcrete the sidewalls of the Open Cut, place invert concrete for the tunnel approaches, and erect structural steel for the C06 and C07 Substations during the quarter. Additionally, the CQ031 and CQ039 contractors completed work in their respective areas, which allowed The CQ032 contractor now has access to those areas which had previously constrained by the CQ031 and CQ039 Contracts. Because of the progress it has made, coupled with unrestricted access, the Contractor has been able to slow the "planned vs. actual construction" difference, which had been approaching 30%, down slightly during the past quarter. The PMT and the contractor also continue to negotiate a re-baselined schedule, which will include scope transfers and help to mitigate the progress curve difference. Construction progress at the vent facilities at Roosevelt Island, Vernon Boulevard, and 12th, 23rd, and 29th streets, however, was minimal. Presently, the MTACC's forecast for Substantial Completion is August 10, 2015, 12 months later than the current approved baseline. [Ref: ESA-95-Sept 12]

The CQ039 contractor was able to transfer the loads onto the new Northern Boulevard Crossing tunnel after its initial unsuccessful attempt in early July 2013. This allowed the contractor to remove the last 4 support columns inside the new tunnel later in the month. Nonetheless, Substantial Completion is still pending due to two remaining issues that need resolution. MTACC used two independent engineering firms to study the pneumatically applied concrete (PAC) cover and, until the results are reported, this remains an open MTA Code Compliance issue. The second issue may eventually take longer to resolve. The ESA PMT and the contractor decided to use a natural thaw process on the frozen ground rather than a mechanically-induced process. The thaw has been on-going for several months. Unfortunately, as of September 30, 2013, there are still pockets of frozen ground which prevent the contractor from performing the final compensation grouting above the tunnel lining structure (to counter-act within-tolerance settlement of the above ground). Until the thaw is complete and the compensation grouting finished, the contractor cannot declare Substantial Completion. The MTACC does not have a projection for when that might occur.

<u>Harold Interlocking</u>: Contract CH053 (Harold Interlocking, Part 1 and G.O.2 Substation): The CH053 contractor progressed its construction during 3Q2013 with the installation of trough for the Tunnel A Approach Structure, continued construction of the 43-S2 retaining wall, continued support of excavation (SOE) and construction of the abutments of the ML4 bridges at the 43rd and 48th streets, selective installation of catenary structures in various areas of Harold Interlocking, and installation of 12kV ductwork in micro-tunnel Runs 1-4 and Run 12.

Nonetheless, the CH053 contractor remains well behind its approved baseline schedule. Based on its historic rate of construction, the PMOC projects that it will take an additional 12 months (until October 1, 2014), for the contractor to complete its construction. Previously, the ESA PMT and the contractor attempted to develop a re-baselined schedule that would result in

completion of the work by December 31, 2013, but the parties have since abandoned that pursuit and now have forecast a Substantial Completion date of June 24, 2014. Since the contractor has never achieved a production rate on this project that would support that date, the PMOC has projected the more pessimistic date of October 1, 2014.

Contract CH054A (Harold Structures Part 2A): The CH054A contractor continued to progress 12kV ductbank installation, construction of the Thomson S-2 and 43-S1 retaining walls, and continued to prepare for the cutover of "F1" Interlocking. The delays due to lack of 12kV ductbank re-design continue to have a negative impact on the Substantial Completion date, which the MTACC now projects to be May 29, 2014, an additional slippage of 2 months since the PMOC's last quarterly report. The PMOC believes that this date is optimistic, however, and projects that, based on current production rates, the contractor will complete this project in late 3Q2014/early 4Q2014. Nonetheless, the CH054A contract is not on the project critical path.

g. Vehicles

Details of the vehicle procurement (non-federally funded portion) are provided in Section 2.5 of this report.

h. Commissioning and Start-Up

A Quarterly Operational Readiness meeting was held on September 26, 2013. Details are provided in Section 2.4 in this report.

i. Project Schedule

	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			

Table 1: Summary of Critical Dates

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

**Source -Based on PMOC 2012 risk assessment results. Given the current status of the project, this date will not be met.

j. Project Budget/Cost

	FFGA			MTA's Curre Budg (CBE	et	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	\$5,215	53.09%
Financing Cost	\$1,036	14.0		\$1,116		\$618	55.34%
Total Project Cost	\$6,350*	86.0	\$4,107	\$8,708*	88.3	\$4,598	52.80%
Federal Share	\$2,683	36.3	\$1,148	\$2,699	30.6	\$1,898	21.79%
5309 New Starts share	\$2,632	35.6	\$1,098	\$2,436.6	27.6	\$1,640	18.83%
Non New Starts grants	\$51	0.7	\$ 50	\$67	0.8	\$62	0.71%
ARRA	0	0	0	\$195.4	2.2	\$195	2.24%
Local Share	\$3,667	49.6	\$2,959	\$6,009	57.7	\$2,700	31.01%

Table 2- Project Budget/Cost Table (as of August 2013)

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

k. Project Risk

The MTACC Risk Management Plan (RMP), Rev. 2.0 dated July 2012, a sub-plan within the ESA Project Management Plan (PMP), has been updated to conform to the ELPEP principles and requirements, and to incorporate FTA/PMOC comments. The FTA conditionally approved Rev. 2.0 on March 4, 2013.

MTACC routinely performs package level risk reviews for new contracts to be procured, although the PMOC notes that this was not done for the recently bid CM005 Contract. For a more detailed discussion, see Section 6.0 of this report.

MONTHLY UPDATE

The information contained in the body of this report is in accordance with Oversight Procedure 25, to "inform the FTA of the most critical project occurrences, issues, and next steps, as well as professional opinions and recommendations." Where a section is included with no text, there are no new "critical project occurrences [or] issues" to report this month.

ELPEP COMPLIANCE SUMMARY

The current status of each of the 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 forwarded its comments to the FTA-RII Office in August 2013. The PMOC incorporated the FTA comments on the PMP in September 2013.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 was provided to the FTA and the PMOC in September 2013. MTACC began full-scale procedures training for its project management personnel during 3Q2013. The PMOC attended the workshops for this training (which it found entirely satisfactory) and recommends that the MTACC continue such training until all personnel are fully trained. 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 has been completed and comments were forwarded to FTA-RII Office in August 2013. The PMOC notes that a TCC review might be warranted given the recent significant personnel changes to many key upper management level positions.
- **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

- Management Decisions
 - <u>Outcome</u>: Program and project level decisions made at appropriate level within MTACC management.

- <u>Status</u>: Improvement noted in elevating certain issues to higher level for those having potential significant impact. The monthly MTACC/FTA/PMOC Executive Meeting provides a venue for discussion of key issues.
- <u>Example</u>: Improvement still needed in responsiveness to FTA's concerns, especially regarding timely resolution of significant budget and schedule issues created by the bid over budget situation on the Contract CM012R procurement in October 2012 and the subsequent cancellation of the solicitation in November 2012. It is the opinion of the PMOC that this critical situation has persisted for an unacceptably long period of time, now over 11 months. DEFICIENT.
- Design Development
 - <u>Outcome</u>: Stakeholder participation in design review process. Dedicated Amtrak liaison and consultant firm performed Quality Assurance (QA) on Electric Traction (ET) design.
 - <u>Status</u>: Process is effective but slow; ET design milestones, although not as critical at this point in terms of overall project impact, are still being missed.
 - <u>Example</u>: Amtrak approval of ET designs has improved, but target dates for design milestone completion continue to slip. IMPROVEMENT NEEDED.
- Change Control Committee (CCC) Process and Results
 - <u>Outcome</u>: CCC approval for changes that may impact project schedule and cost must be approved by committee. Candidate Revision (CR) process also implemented in CCC.
 - <u>Status</u>: Scope shifts among construction contracts are being presented to the CCC for review and approval with the exception of creation of new package CM005. Proposed changes are brought before the Committee and often approved despite the fact that one or more voting members of the Committee voice a concern or request additional information before approving a proposed change.
 - <u>Example</u>: The new Contract package CM005 was neither reviewed nor approved by the CCC prior to advertising, nor has the new repackaging plan for the CM012R package been submitted for review and approval. Approval of the CM005 Package was made after advertising and without construction cost or schedule information provided to the Committee. Scope removal from the CM015 Package was approved despite a request from the MTACC Project Controls representative to postpone the vote pending review of additional information. Continuation of adequate performance is now of concern. DEFICIENT.
- Stakeholder Management
 - <u>Outcome</u>: Stakeholder participation in schedule re-baselining meetings and risk workshop. Coordination with stakeholders for outages and resources (force account meetings).
 - <u>Status</u>: Coordination with railroads with regard to force account support and force account construction has improved over time based on experience to date

and railroads' efforts to increase their management oversight of ESA activities. Continued improvements are still needed.

- <u>Example:</u> Construction Progress on Contracts CH053/54A needs to accelerate. Planning of LIRR force account work for 2014 in support of the ESA project has recently become an issue (the LIRR informed ESA that, because ESA had not supplied its desired 2014 track program by the specified date, ESA had lost its track usage priority for that year). IMPROVEMENT NEEDED.
- o Issues Management
 - <u>Outcome</u>: Monthly executive meeting with FTA/MTACC to discuss key issues.
 - <u>Status</u>: Last executive meeting was held on July 19, 2013.
 - Although key project issues are being discussed in these forums; MTACC resolution of these issues continues to lag. For example, MTACC and the ESA Project Office committed to having a draft re-baseline schedule ready for review by mid- September 2013, however this forecast was not met. DEFICIENT
- o Procurement
 - <u>Outcome</u>: Decision to use Invitation for Bid (IFB) or Request for Proposal (RFP) made by MTACC based upon scope of work and type of procurement
 - <u>Status</u>: Decision process for procurement methodology has improved in 2012, however additional improvement is needed.
 - <u>Example</u>: Although MTACC has improved in the decision process for its procurement methodology; continuing shifts in scope complicate the procurement process; the latest example is the proposed scope split for CS 284 (Tunnel Systems Package). Also, MTACC has not decided whether the CM007 package will be procured as a design-bid-build or a design-build contract. IMPROVEMENT NEEDED.
- o Timely Decision Making
 - <u>Outcome</u>: Project scope, schedule, budget continuously directed and controlled by administrative and management processes.
 - <u>Status</u>: Additional focus on decision timing with regard to issues outcome is needed to make this process effective.
 - <u>Example</u>: It has been almost a year since the cancellation of the CM012R solicitation, yet MTACC has not fully determined the impacts of the bid cancellation on the overall project schedule and budget to the best of the PMOC's knowledge. DEFICIENT
- Risk Informed Decision Making
 - <u>Outcome</u>: Project risk management team decides on mitigation measures/actions for risks identified in risk register.
 - <u>Status</u>: Risk reviews are completed for bid packages; risk register updated on routine basis; significant risks identified and monitored. MTACC initiated monthly risk management review meetings with the FTA and the PMOC in

January 2013 and has performed three package level risk assessments in 2013. Timing of these package level risk assessments needs to be better coordinated with the procurement cycles.

<u>Example</u>: The risk assessment for CS179 was performed well into the BAFO portion of the procurement for this package, making it difficult to incorporate any useful information obtained from the risk process into the procurement process. Also, Contract CM005 was advertised and bids accepted without completing a package level risk assessment as required by the Risk Management Plan. DEFICIENT.

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

With MTACC's submission of its East Side Access FTA Quarterly Report (Apr, May, June '13) and then continuing with the July and August 2013 monthly reports, the PMOC notes that the ESA project continues to not be 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 opinion is that this is a serious deficiency and needs to be resolved immediately. [Ref: ESA-114-Sep13] Specific areas of non-compliance were provided to MTACC at the September 12, 2013 ELPEP Quarterly Review Meeting. The PMOC's major areas of concern, previously identified, 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 CM012 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: Since June 2013, the ESA project continues to be noncompliant with requirements for IPS Updating, Forecasting, and Schedule Contingency Management. Additionally, ESA is no longer providing any schedule information about future planned contract packages and has ceased providing the monthly IPS updates.
- Cost Management Plan: Since June 2013, the ESA project continues to be noncompliant 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. At that time, the FTA and MTACC 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. MTACC had previously indicated that these revised baselines would be available by mid-September 2013. As of September 30, 2013, however, MTACC has not provided the revised ESA cost and schedule baselines.

1.0 GRANTEE'S CAPABILITIES AND APPROACH

1.1 Technical Capacity and Capability

a) Organization

There are currently no issues to report pertaining to the MTACC organizational structure.

b) Staffing

The ESA Project Office lost two key staff members during the month of June 2013; the Project Controls Program Manager and the Operational Readiness Program Manager. ESA also lost its Harold Program Manager, lead scheduler, and the Rail Systems Program Manager in Q3 2013. Replacements have been hired to fill the Harold Program Manager and Project Controls Program Manager. ESA needs to re-staff the remaining open key positions as soon as possible.

1.2 Project Management Plan

a) History of Performance

MTACC re-baselined the ESA Project in May 2012. These baselines resulted in a risk adjusted budget of \$8.24B (not including rolling stock reserve and finance cost) and a projected RSD in August 2019. This is the second re-baselining effort undertaken by ESA since the FFGA. Given the impact of the CM012R bid overrun and the continuing delays in several major procurements, the PMOC believes that ESA will need to re-baseline the project again.

b) PMP

The Grantee has updated the PMP and issued Rev. 9 on June 28, 2013. The PMOC completed its review of the revised PMP in August 2013 and incorporated the FTA comments in September 2013. The PMOC will also review the revised PMP and determine any impacts to the current Schedule Management Plan (SMP) and the Cost Management Plan (CMP).

1.3 Project Controls

a) Schedule

The ESA IPS has not been properly updated since October 2012, as required in the SMP (Section 5.3 – Update Process). The delay caused by cancelling the CM012R contract and restructuring it into three separate contracts and the subsequent delay in procuring those contracts is not properly shown on the updated IPS. In addition, major contract procurement dates continue to be indicated as TBD. Consequently, it is not possible to properly assess the viability of the current baseline schedule from the updated IPS.

b) Cost

The project estimate at completion remains \$8.7 billion (the same as the result from the rebaseline in May 2012) not taking into account the cost associated with the delay caused by cancelling the CM012R contract, or the projected higher costs for the packages created out of the CM012R scope.. The CMP states (Section 5.7 – Monthly Update Process) that "each month the project level EAC is forecasted and the baseline budget is updated". That is not the case.

The CMP needs to be revised to reflect changes resulting from the May 2012 project re-baseline effort

The Grantee

needs to follow the CMP as agreed to improve its project budget effectiveness.

1.4 Federal Requirements

a) FFGA

As a result of MTACC's cost and schedule re-baseline effort in 2011/2012 and the independent risk assessment completed in May 2012, MTACC presented a new budget and RSD to the MTA Capital Program Oversight Committee (CPOC) on May 21, 2012: \$8.24 billion (w/o vehicles and financing). At the December 12, 2012 special briefing to FTA-RII by MTACC on the decision to cancel the CM012R solicitation, the MTACC President said that MTACC's analysis of the cost and schedule impact to the ESA project budget would not be completed until January 2013, prior to presentation at the January 2013 CPOC meeting. At that time, FTA-RII advised MTACC that the FTA has decided to place on hold the FFGA Amendment pending written commitment from the MTA regarding details of an impact analysis of the cost and schedule impacts resulting from the cancellation of the CM012R solicitation and subsequent division of the work scope amongst two existing construction contract and three new construction packages. MTACC has advised FTA-RII on several occasions since missing its January 2013 commitment that it will not provide a revised cost and schedule baselines until the fall of 2013.

b) Federal Regulations

There are currently no issues to report with regard to the Uniform Property Acquisition and Relocation Act of 1970.

1.5 Safety and Security

a) Safety Certification Process

At the September 26, 2013 Operational Readiness Quarterly Meeting, the MTACC Director of Construction Safety, presented a brief status of remaining design packages that have to be reviewed and approved by the Safety Certification Committee. He presented a schedule for completion of preliminary hazard logs on remaining design packages and also handed out a sample tracking sheet that will be used to track the status of certification for the various Contract Packages and associate certifiable elements for each package.

The MTACC Director of Construction Safety stated in the meeting referenced above that the Operational Readiness Group is in the process of developing a flow chart to demonstrate and memorialize the flow of information from design and into construction. He noted that design package managers need to be aware of their responsibilities with respect to modifications to the original checklists. This direction will come from the GEC. Once the direction is given and modifications are initiated, technical working groups will be established to acquire feedback on the certifiable elements from the CM teams. Although the process for certifying elements that have already been constructed was described, tangible results for construction packages that are nearing completion were not presented at the meeting. The MTACC Director of Construction Safety had committed to providing a status report on efforts to progress this aspect of the safety certification process at this Operational Readiness Meeting. This remains a PMOC concern, as the process continues to lag. [Ref: ESA-A47-March13]

The PMOC remains concerned that personnel assigned to the Safety Certification Committee are continually changing; thus hampering the continuity and effectiveness of the Committee. New members frequently appear to be unaware of the safety certification requirements and process. The PMOC is also concerned that the Safety and Security Committee has not met on a regular

basis as per the ESA SSMP. This lack of regular meetings will affect the Committee's ability to effectively coordinate activities related to the Safety Certification Process. The PMOC has expressed its concerns to the MTACC Director of Construction Safety and recommends that the Safety Certification Committee produce a calendar for regularly scheduled meetings and adhere to it. The PMOC also recommends that the MTACC Director of Construction Safety stress the need to maintain a stable committee to all of the participating stakeholders having representation on the Committee. [Ref: ESA-96-Sep12] Although the MTACC Director of Construction Safety has acknowledged the need to maintain stability of the Committee and noted that he would discuss this with LIRR Management, there is no indication to date that this has been done.

b) Project Construction Safety Performance

Project safety statistics for lost time accidents continue to trend slightly above the Bureau of Labor Statistics (BLS) national average at 2.23 vs. 2.00 lost time accidents per 200,000 hours. Although there has been continuing improvement in the overall project safety statistics, 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 (2.97 vs. 2.23 lost time accidents per 200,000 hours). On the CQ039 Contract, which is nearing completion, the lost time accident statistics continue to trend well above the ESA Project average (5.15 vs. 2.23 lost time accidents per 200,000 hours).

c) Security

The PMT did not report any significant security issues during September 2013.

1.6 Project Quality

a) ESA Project Quality Manual (PQM)

The ESA Quality Manager had committed to revising the ESA Project Quality Manual (PQM), Revision 6, issued in February 2009 by the end of February 2013. A draft of Revision 7 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 date kept slipping and a September 30, 2013 date has not been met. The PMOC was told that the revision is minor and although a draft version was requested, one has not been provided. The ESA Quality Manager is now anticipating that a draft will be sent to the PMOC in early October 2013, but the PMOC has no reason to believe that date will be met. The PMOC continues to believe that it would be beneficial to issue Revision 7 of the PQM as soon as possible. [Ref: ESA-93-June 12]

b) 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 ESA Quality Manager stated that he would issue Nonconformance Reports (NCRs) in April 2013. This did not happen but NCRs were supposedly issued to the contractor in June 2013. In addition, Deficiency Reports (DRs) were supposedly issued to the ESA Construction Management (CM) Office in June 2013 for not obtaining As-Built drawings from the contractor. Despite repeated requests, the PMOC has not been able to obtain the NCRs and DRs from ESA. The Contractor has started to submit a limited number of As-Builts but they are not in the correct format. As a result, the GEC has to convert the files, a task that is not in their scope. Each ESA contractor is supposed to submit As-Builts each month in the proper format. This is not occurring. Additionally, the As-Builts that are submitted are not up to date. The PMOC is concerned that this issue is still not resolved and that

the ESA Project Office is not managing this contractor. The PMOC recommends that ESA press to bring this issue to closure. [Ref: ESA-100-Dec12]

c) CH053, CH054A, and CQ032 Quality Issues

The single construction contractor working on the CH053, CH054A, and CQ032 contracts was delinquent in responding to Surveillance Reports and closing Nonconformance Reports. The situation has improved since the June 2013 report.

The CH053 contractor's Program Manager did not attended three Monthly Quality Management Meetings during the first half of 2013. The PMOC recommended that when the contractor's management is not present, the Monthly Quality Management Meeting be rescheduled. During the 3Q2013, the CQ032 contractor's Program Manager did not attend a meeting and did not send a representative so the ESA Quality Manager rescheduled the meeting.

d) Quarterly Quality Oversights (QQOs)

During the third quarter of 2013, the PMOC attended QQOs for the following contracts: CM013A, CQ031, CM009, CQ032, and CH053/CH054A. The following are the PMOC's observations:

Contract	Observations
CM013A	The new Quality Manager was well prepared, having previous experience on SAS.
CQ031	A new Quality Manager had difficulty finding information.
CM009	A new Quality Manager was well prepared.
CQ032	Reports and deliverables were missing. Information was not current.
CHO53/054A	Many submittals were missing. They had difficulty finding information.

The CQ032, CH053/CH054A contractor did poorly during the QQO's. This substantiated the issues with this contractor as discussed above.

As mentioned in the PMOC's last Comprehensive Report, the ESA quality auditors use a generic checklist when performing their QQOs. The contractor's Quality Plan that was approved by ESA often contains additional requirements. The PMOC recommends that each QQO checklist be tailored to include the requirements from the contractor's Quality Plan since that would be more meaningful than auditing to only the generic MTACC requirements. [Ref.: ESA-110-June 13]

1.7 Stakeholder Management

a) Railroads

In coordination with Amtrak and LIRR, more weekend outages took place in Harold Interlocking with a focus on the installation of catenary and signal towers. Eighteen (18) catenary poles remain to be installed, but all of the poles critical for the westbound bypass slab outage were installed as of this report.

b) Others

No other coordination efforts to discuss for this quarter.

1.8 Local Funding

a) MTA/New York State (Capital Plan)

MTACC announced at the May 2012 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.

b) Other Sources

The total Federal funding commitment as of May 2013 remained at \$2.699 billion, as indicated in Table 2 in the Executive Summary.

1.9 Project Risk Monitoring and Mitigation

a) Risk Management Plan

The MTACC Risk Management Plan (RMP), Rev. 2 dated July 2012, is a sub-plan within the ESA Project Management Plan (PMP). The RMP, Rev 2 was updated and has incorporated the FTA/PMOC review comments to bring it into compliance with the ELPEP principles and requirements. The FTA formally notified MTACC of its conditional acceptance of the RMP by letter dated March 4, 2013.

b) Monitoring

The MTACC committed that PMT would hold monthly risk meetings with the PMOC to review current risk related activities at the end of 2Q2012. The kick-off meeting occurred in January 2013. The last meeting was held on July 31, 2013. Although the target has been monthly meetings, the PMT has only been able to conduct the meetings bi-monthly on average to date. The PMOC encourages the PMT to be more proactive and keep to a monthly schedule because valuable insight and information is discussed among the meeting participants.

c) Mitigation

Discussion of current mitigations is discussed in Section 6.3 below.

2.0 PROJECT SCOPE

2.1 Engineering/Design and Construction Phase Services

<u>Status:</u>

As of the end of August 2013, MTACC reported that the Engineering/Design effort was 97.9% complete (on a cost invoiced basis). The percent complete varies monthly and depends on the award of additional tasks to the GEC.

The 100% submittal for the Stage 3 catenary design (FHA03) is now finalized.

The PMT met with Amtrak on September 5, 2013 to review their comments on the Stage 4 60% Catenary design. Amtrak stated at the meeting that because of the midday storage yard and the catenary work involve (modifying and installing 20 new catenary structures) they want to see catenary work in the midday storage incorporated into the 60% before they approve it (forecast

for completion by early October 2013. The GEC is incorporating the midday storage yard catenary work into the 60% design and continues its work on the 90% design which is forecast for completion by the end of October 2013.

The confirmatory set of drawings for CM014B was circulated between the major stakeholders (LIRR, MNR) in 2Q2013 for assurance that all of their comments have been adequately addressed. LIRR indicated their satisfaction with the current design at a July 29, 2013 meeting. A similar meeting is being scheduled with MNR but, as of this report, a date has still not been established to the best of the PMOC's knowledge. A Change Control Committee (CCC) item was presented and approved on September 17, 2013 to transfer the scope of work within the right-of-way of 48th Street (the structural box and the street utility work) from CM015 into CM014B so work can proceed independently of the building owner's redesign and construction status.

As part of the review of the schedule for the remaining Harold force account and third party work, the PMT is taking the work for the relocation of LIRR tracks ML2 and ML4 out of the CH057 package and creating a separate track construction package (CH057B). This work will be done by an MTA on-call track contractor in early 2014. This change was presented and approved by the CCC on September 17, 2013. The remaining scope of CH057 is forecast to be advertised in the 4Q2013, with an anticipated Notice to Proceed (NTP) in the 2Q2014. The major scope items in CH057 will be construction of the loop box structure, replacement of the 48th Street Bridge for ML2 and the Tunnel D Approach Structure. As part of its program replanning effort, the PMT is looking at breaking up the CH057 package into four separate packages which will include scope shifts from the CH058 and CH059 packages.

The 90% submittal for CH058 (Harold Structures - Part 3b) remains 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 being examined 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 a decision on a construction alternate and the overall Harold rescheduling is anticipated by October 2013 (previously forecast for September 2013).

The GEC repackaging modification for the CM007 contract package was fully executed on September 5, 2013. The PMT requested that the GEC develop the basic concepts for a cast-in-place/pre-cast option. Cast-in-place vs. pre-cast discussion materials was forecast to be ready in early September 2013; however this date was not met. These materials will be used to form the basis of an industry outreach to determine the best approach. The GEC forecasts that it will need four to six months to complete the entire bid package.

Completion of the stand-alone Track and Signal Installation Contract package (CS284) was forecast for completion by September 30, 2013; however this date was not met. The Traction Power Contract package (CS084) had an anticipated completion date of August 30, 2013; however this forecast was not met. Technical drawings and specifications were completed in September 2013, however work on the Contract documents continue.

Observation:

The GEC and PMT continue to consistently miss all of its target dates for remaining design activities on the project.

Concerns and Recommendations:

The PMT design management team needs to focus on achieving intermediate milestones in a timely fashion and work closely with the GEC to help make this happen. The PMOC continues to recommend that the PMT develop a design milestone tracking sheet for the remaining design work on the project; similar to what was done for the catenary design work; in order to more effectively manage the design effort. [Ref: ESA-103-Dec12]

2.2 Procurement

Status:

As of the end of August 2013, the total procurement activity on the project was reported to be 61.9% complete, with \$5.386 billion in contracts awarded out of the \$8.708 billion revised budget.

As discussed in previous monthly reports in 2013, the scope of work from the cancelled CM012R is being divided among several contract packages (existing and new). The plan is to split the scope of work into three new contracts: the first one, CM005, includes work scope for the southern structures. The lowest bid came in at approximately \$200.6M, which was below the ESA package estimate. The Contract was awarded and Notice to Proceed was September 9, 2013.

The second new contract package CM006 (Northern Structures) was planned to be advertised by July 1, 2013; however this date was not be met and the advertisement went out August 15, 2013 (with Contract documents available on August 26, 2013). Proposal due date was October 17, 2013, however this date has been extended to October 31, 2013. The anticipated award date is forecast for March 2014.

The third new contract package CM007 (caverns) is also 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. This contract is on the critical path of the May 2012 approved baseline schedule. MTACC committed in April 2013 to have a recommendation for award ready to present to the MTA Board in July 2013, and that date was not met. The ESA PMT then re-forecast recommendation to award ready to present at September 2013 MTA Board meeting, with award of the Contract following in late September/early October 2013. The PMOC was informed in August 2013 that MTACC would not have a recommendation for award in time for the September 2013 Board meeting, as the ESA team continues negotiations and has yet to select a contractor. The planned award date and NTP remain TBD.

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 split will have an impact on the Systems Package 1 (CS179) Contractor, who is

responsible for systems integration for these packages. Since there was no current IPS update provided this month, the date for the CM014B package, which was forecast for September 1, 2013, is currently unknown.

Bids were opened for CH057A on August 8, 2013. There were eight bidders and the low bid was \$104,300,000, which was under the ESA's estimated amount. Formal award is now expected in October 2013 (previously forecast for September 2013). Remaining work in CH057 was previously forecast to be advertised in August 2013, with NTP forecast for January 2014. The date is now TBD as the PMT considers repackaging options based on the outcome of the Harold work schedule review/re-baselining that it is conducting.

Observation:

The ESA PMT did not meet any of its 2012 schedule re-baseline dates for the four major packages that were to be procured in 2012 (CM012R; CS179; CM014B; CH057). Procurement dates for major packages continue to slip or remain TBD as of September 2013.

Concerns and Recommendations:

The lack of stability in the contracting strategy and 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. [Ref: ESA-113-June 13]

The PMOC has expressed its concern to the grantee about the projected duration for the procurement of the CM006 package.

Based upon its analysis of durations for previous RFP procurements on the ESA project, and given the results of the risk workshop, the PMOC recommends that the PMT adjust its procurement duration estimate based on the risk adjusted duration developed at the risk workshop.

CM006 and CM007 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.

The PMOC remains concerned about the utilization of the entire ESA Program Schedule contingency for procurement activities, as well as the impacts of delaying such significant amount of construction work. This resulted in the need to re-plan/re-baseline the Program. Since the CM012R related packages and CS179 packages were/are on the project critical path, and CH057 and CM014B are near critical, the ESA PMT needs to adhere to the requirements in

its SMP to forecast the impact to the overall project schedule of the delays to the procurements referenced above, and produce a new baseline schedule as quickly as possible. [Ref. ESA-102-Dec12]

2.3 Construction

ESA reported in its August 2013 Monthly Progress Report that the total construction progress reached 53.4% complete on a cost invoiced basis (vs. 56.6% planned), in accordance with its rebaselined budget of May 2012. The data date for financial and progress figures, for all reported contracts, is August 31, 2013. Details for active construction contracts are provided below.

Manhattan Contracts

<u>CM004 – 44th St. Demolition and Construct Fan Plant Structure and 245 Park Ave.</u> <u>Entrance</u>

<u>Status</u>: The EAC remained at \$62.84M. The forecast Substantial Completion (SC) date moved to January 31, 2014 from the previous January 14, 2014 for the Vent Building and January 31, 2014 from the previous January 14, 2014 for Beneficial Use of the 245 Park Ave. Entrance. The percent complete is 86.4% vs. 96.4 planned. Data date for the table below is August 31, 2013.

		1	2	3	4	5	6
Contract	Bas	eline	Current Approved Baseline \$55.87M	Change to Original (2 - 1) +15.1M	EAC / Forecast \$55.87M	Change to Original (4 – 1) +\$15.1M	Change to Current (4 - 2) +0M
Cost	(Av	vard)		37.03%		37.03%	0%
Scheduleo SC Date	1 09/2		07/15/13 08/03/12 (245 Park)		01/31/14 01/31/14 (245 Park)		
Duration (NTP - SC)	24		46 mos. 35 mos. (245 Park)	+22 mos. 91.66% +11 mos 45.83% (245 Park)	52 mos. 52 mos. (245 Park)	+28 mos. 116.66% +28 mos 116% (245 Park)	+6 mos. 13.04% +17 mos 48.57% (245 Park)
Percent Complete		Actual - 12 mos.		Actual - 6 n	nos.	Avg. Req'd. Pro	gress
Plan A	ctual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
96.4% 8	36.4%	*N/A	*N/A	*N/A	*N/A	*N/A	*N/A

From August 2013 ESA Monthly Report

*MTACC reports that the curve for percentage of completion has recently been redesigned again.

Construction Progress:

44th St. Vent Plant

- Structural steel erection is complete
- Continuing with perimeter and interior concrete block erection
- Continuing with intumescent paint application and cementitious column/beam encasement
- Preparing for roof installation
- Removed the temporary interior scaffold and began the runway for the re-installation of the Gantry Crane

 Completed fabrication of below grade steel needed for 1st floor slab and supports for the Gantry Crane. Delivery of the steel is being coordinated with interior scaffold removal and exterior scaffold erection.

245 Park Ave. Entrance

- The MTACC CM directed the contractor to start and continue to run the escalator
- The contractor has completed all of the punchlist except for the railing.
- There are 2 items in the submitted escalator test procedure that require more detail from the escalator manufacturer. They have not been very cooperative.

Observations/Analysis:

It appears that MTACC/MNR and the contractor are moving towards resolving the issues that have delayed declaration of Beneficial Use for the 245 Park Avenue work.

Concerns and Recommendations

The PMOC will continue to monitor the resolution of the 245 Park issues and the impact to the extended schedule for Beneficial Occupancy on January 31, 2014.

CM009 Contract – Manhattan Tunnels Excavation/Structures Part 1

Status: The Estimate at Completion (EAC) for the CM009 contract was amended in June 2013 to \$430,944,000, to include the scope of work for waterproofing, shotcrete, and invert construction in the GCT3 and GCT4 Crossover and GCT5 West Wye caverns. The Substantial Completion date for this additional work was also amended through Milestone 9A to September 30, 2013. The contractor met this milestone and completed all its work for this contract. Actual progress for August 2013 was 1.3% versus 0.2% planned. Cumulative progress through August 31, 2013, was 98.3% actual versus 98.2% planned. This contract was not on the project critical path.

CM0	CM009 1			2		3		4		5		6	
			ginal seline	Ap	irrent proved iseline		Change to Original (2 – 1)]	EAC / Forecas		Change to Original (4 – 1)		Change to Current (4 - 2)
			8.00M vard)	\$4	\$430.9M		+\$2.9M +0.6%		\$430.9M		+\$2.9M +0.6%		0 0
	Scheduled 07/08/10 SC Date		08/10	9/	30/13	3			9/30/13	3			
Durat (NTF SC)	<u>?</u> _	48	mos.	86	86 mos.		+38 mos. +79.2%		86 mos	-	+38 mos. +79.2%		0 0.0%
	rcent nplet		Act	Actual - 12 mos.		Actual - (- 6 n	6 mos.		Avg. Req'd.		Progress
Plan	Plan Actual Tota		al	Avg./n	10	Total	Av	'g./mo	Co	ontract SC	F	orecast SC	
98.2%	98	3.3%	6.4	4%	0.59	%	1.7%		0.3%		N/A – Past Due		N/A – Complete 9/30/13

From the August 2013 ESA Monthly Report

<u>Construction Progress</u>: As of September 30, 2013, the contractor completed all waterproofing, shotcrete placement, and invert construction in the GCT3 and GCT4 Crossover and GCT5 West Wye caverns that was required to achieve Milestone 9A, the final milestone of the contract. The CM009 contract is now complete.

<u>Observations</u>: The contractor completed Milestone 9A on schedule, which was an amendment to its baseline scope of work.

<u>Concerns and Recommendations</u>: The PMOC has no further recommendations concerning this contract.

CM013 - 50th Street Vent Facility

<u>Status</u>: The EAC increased to \$126.47 from the previous \$125.85M. The forecast Substantial Completion (SC) date remains December 31, 2013. The actual percent complete is 86.7% vs. 100% planned. Data date for the table below is August 31, 2013.

		1	2	3	4	5	6
		Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 - 2)
Contract Cost		\$118.35M (Award)*	\$123.32M	+\$4.97M +4.18%	\$126.47M	+\$8.12M 6.86%	+3.15M +2.55%
Sched SC I		06/10/12	12/31/13		12/3113		
Dura (NTP		29 mos.	47mos.	+18 mos. +62.06%	47 mos.	+18 mos. +62.06%	+0 mos. n/a
	rcent nplete	Actual - 12 mos.		Actua	l - 6 mos.	Avg. Req'	d. Progress
Plan	Actual	l Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
100%	86.7%	21.8%	1.81%	9.9%	1.65%	3.33%	3.33%

From August 2013 ESA Monthly Report

*Total award price of \$118,355,000 includes \$94,355,000 for CM013 and \$24,000,000 for work performed by the owner of the 300 Park Ave. building.

Construction Progress:

- Concrete block wall erection achieved approximately 95% completion.
- Stair #1 in the shaft has been completed. Railings and stairs in the Air Plenum are complete.
- Concrete slab work is complete throughout is complete and roofing will start in October 2013.
- Preparations have begun to begin erection of building cladding and cladding of the Utility Chase and Loading Dock parapet.
- 50th Street utility work is complete and preparations are underway to begin Public Plaza work and street restoration.

<u>Observations/Analysis</u>: The Stop-Work-Order issued by the Code Compliance Unit (CCU) for pneumatically applied concrete was partially lifted and the work to complete Stair #1 in the shaft was able to be completed. Complete closure of the order is pending the contractor completing the required mock-up for the pneumatically applied concrete.

<u>Concerns and Recommendations</u>: MTA reports in the August 2013 Monthly Report that the contractor will finalize the completion schedule following approval of change order for new agreed milestone dates. The PMOC will continue to monitor the impact this final completion schedule has on the current forecast completion date of December 31, 2013.

CM013A – 55th Street Vent Facility

<u>Status</u>: MTA reports that through August 31, 2013 the EAC has increased to \$59.41 from the previous \$58.85 million. Forecast Substantial Completion date is now March 25, 2015 from the previous March 11, 2015. The current Approved Baseline Schedule for Substantial Completion is April 5, 2015. As of August 31, 2013, MTA reports that the actual percent complete is 18.4% vs. 18.7% planned.

		Original Baseline	Current Approved Baseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)
Contract Cost		\$56.04M	\$56.38M	+\$.34M +.60%	\$59.41M	+\$3.37M 6.01%	+3.03M +5.37%
Sched SC I		04/05/15	04/05/13		03/25/15		
Dura (NTP		31 mos.	31mos.	+0 mos. +0 %	30.33 mos.	33mos. -2.16%	-3.33mos. -2.16%
-	rcent nplete	Actual	- 12 mos.	Actua	l - 6 mos.	Avg. Req'	d. Progress
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
18.7%	18.4%	N/A	N/A	11%	1.83%	81.6%	4.26%

From August 2013 ESA Monthly Report

Construction Progress:

- The steam abatement work is complete. Temporary utility tie-ins are complete and supported under the completed street decking.
- Mechanical excavation has reached an invert elevation approximately 20' below the street surface.
- Line drilling and blasting began the week of September 29, 2013 and is ongoing with approximately 3 blasts per day. Each blast covers approximately 14 BCY at 4' in depth. Mucking is performed daily during swing shift.

Observations:

The delays caused by the utility work reduced some of the positive float that had been achieved in the schedule. With these delays resolved it appears that the work is proceeding efficiently with a good blast/muck/blast sequence. This is the primary focus of the work during this period.

Concerns and Recommendations:

None at this time.

CM014A – GCT Concourse & Facilities Fit-Out

<u>Status</u>: MTACC reports that through August 31, 2013 the EAC has increased to \$53.40 Million from the previous \$51.99 million. Forecast Substantial Completion has been extended to April 1, 2014 from the previous February 15, 2014, representing the ongoing delays claimed by the contractor caused by the Systems Control and Data Acquisition (SCADA) system redesign and resubmitted shop drawings review. The actual percent complete is 45.5% versus 91.6% planned. Data date for the chart below is August 31, 2013.

	1	2		3	4	5	6
	Origin Baseli	ne Aj	arrent oproved aseline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 - 2)
Contract Cost	\$43.50 (Awar		3.65M	+\$0.15M +.0.3%	\$53.39 M	+\$9.89M +22.73%	+9.74M +22.31%
Scheduled SC Date	04/25/	13 07	/08/13		04/01/14		
Duration (NTP - SC)	18 mo	s. 21	mos.	+3 mos. +16.66%	+29 mos	+11 mos. +61%	+8 mos. +39.09%
% Compl	ete	te Actual - 12 mos		Actual - 6	mos.	Avg. Req'd. Pr	ogress
Plan	Actual	Total	Avg./n	10 Total	Avg./mo	Contract SC	Forecast SC
91.6%	45.5%	32.0%	2.66%	5 11%	1.9%	N/A	7.78%/mo.

From August 31, 2013 ESA Monthly Report

Construction Progress:

- Erection of CMU walls and door frames is being completed in all Zones.
- Branch conduit installation continues throughout.
- Installation of HVAC ductwork continues.
- Fabrication of equipment continues.
- A Preparatory Phase Meeting was held on September 26, 2013 for the delivery and installation of the 6 cast coil transformers, 2 of the unit substation transformers and associated wiring. This installation will be done in October 2013 in accordance with coordination with Metro North Railroad (MNR).

Observations/Analysis:

MTACC and the contractor continue to meet to resolve differences on the time impact to the schedule caused by the SCADA redesign delay. MTACC has capped the delay at 308 days in order to contain the contractor's continuing addition of time to the schedule based on this issue.

As the PMOC has previously reported that Siemens has submitted documents outlining their position on the elements of the power distribution system that are being fabricated in China. The Project Office has transmitted these to MTA Legal for determination. As of this report the PMOC has been advised that no determination from MTA Legal has been transmitted back to the Project Office or the contractor. There has been no response to the PMOC from MTA Legal on requests for clarification of the status on this issue.

As of this report the ESA Project Office advised the PMOC that the requested documentation from the contractor for Ship America for the Chinese fabricated elements remains outstanding.

Concerns and Recommendation:

The PMOC will continue to monitor both the proposed scope transfer work from CM014-B to this contract and the negotiations for time impact for the SCADA redesign and their overall impact on the completion dates for this contract, and any impacts these schedule changes may have on future contract(s).

Queens Third-Party Contracts

CQ031 Contract - Queens Bored Tunnels and Structures

<u>Status</u>: The Estimate at Completion was reduced to \$777,523,000 due to a scope transfer to a future contract that was made during 3Q2013. Actual progress for August 2013 was 0.5% versus 0.0% planned (original contract complete and amended work not projected). Cumulative construction progress as of August 31, 2013, was 97.8% actual versus 100.0% planned. This contract is not on the project critical path.

	1	1		2		3		4		5	6
	<u> </u>	Original Baseline		Current Approved Baseline		Change to Original (2 – 1)		EAC / Forecast		Change to Original (4 – 1)	Change to Current (4 - 2)
Contrac Cost	t \$648.9 (Awar		\$753.3M			+\$104.4M +16.1%		\$777.5M		+\$128.6M +19.8%	+\$24.2M +3.2%
Schedule SC Date		/12	09/26/12					4/21/14	*		
	Duration36 mos.(NTP -		36 mos.			(no change)		55 mos		+19 mos.* +52.8%	+19 mos. +52.8%
Percent	Complete	A	Actual - 12 mos.		Actual - 6		ó mos.		Avg. Req'd. Progress		
Plan	Actual	Te	otal	Avg./m	10	Total	A	Avg./mo	C	Contract SC	Forecast SC
100.0%	97.8%	10.7	%	0.9%		7.5%	1	3%]	N/A – Past Due	0.4%/mo.*

From August 2013 ESA Monthly Report

*Based on CQ031 contract addendum that includes construction of Tunnel A extension and construction of Westbound Bypass concrete slab under Lines 2 and 4 (early work scope transferred from CH057).

<u>Construction Progress</u>: The contractor successfully installed the 600' long concrete slabs under Amtrak/LIRR Lines 2 and 4 in Harold Interlocking during this past quarter. These slabs will support the tracks when a future contractor installs a "jacked box" under the tracks to construct the Westbound Bypass Tunnel. In addition to the installation of the slabs, the CQ031 continued to install secant piles for the support of excavation (SOE) for the extension of the Tunnel A Approach Structure during the quarter. Through September 30, 2013, the contractor has installed 224 of 246 piles.

<u>Observation</u>: The contractor installed the concrete slabs on an aggressive schedule and did so successfully. The contractor is also ahead of its amended schedule installing the secant piles.

<u>Concerns and Recommendations</u>: Since the contractor has completed the scope of its baseline contract and has adhered to schedule for the amended work, the PMOC has no further recommendations at this time.

CQ032 Contract - Plaza Substation and Queens Structures

<u>Status</u>: The Estimate at Completion increased to \$231,792,000 during the 3Q2013. The contract Substantial Completion date remained at August 14, 2014, although the MTACC revised its forecast SC date to August 10, 2015, an increase of 2 months over its previous forecast. Actual progress for August 2013 was 3.3% versus 3.9% planned. As of August 31, 2013, cumulative construction progress was 36.6% actual versus 65.7% planned. This contract is not on the overall ESA project critical path.

	1			2			3	4	5	6
		Original Baseline		Current Approved Baseline		Change to Original (2 – 1)		EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 - 2)
Contract Cost		\$147.38M (Award)		\$179.4M		+\$32.0M +21.7%		\$231.8M	+\$84.4M +57.3%	+\$52.4M +29.2%
Schedul SC Dat		08/14/14		08/14/14				8/10/15		
Duration (NTP - SC)		36 mos. 36		o mos. ((no change)	48 mos.	+12 mos. +33.3%	+12 mos. +33.3%	
Percent	Percent Con		mplete Actual -		- 12 mos.		Actual -	6 mos.	Avg. Req'd. Progress	
Plan	Plan A		ctual Tota		Avg./mo		Total	Avg./mo	Contract SC	Forecast SC
65.7% 36.6%		6.6%	25	5.4% 2.1%			19.1%	1.6%	5.3%/mo.	2.9%/mo.

From August 2013 ESA Monthly Report

<u>Construction Progress</u>: The contractor continued to apply waterproofing and shotcrete on the sidewalls of the Open Cut (Plaza Substation), pour inverts for the tunnel approaches, and erect structural steel for the C06 and C07 Substations during the 3Q2013. The contractor also continued construction of the B-10 Substation building with completion of exterior and interior CMU walls and the start of exterior brickwork. Construction at the Roosevelt Island, Vernon Boulevard, and 12th, 23rd, and 29th St. vent facilities is nearing completion and was limited to punchlist repairs.

<u>Observations/Analysis</u>: The contractor's construction of the tunnel approach inverts, waterproofing and shotcreting of the sidewalls, and erection of structural steel continues to go very well. Unfortunately earlier access restraints, coupled with the contractor's prior slow construction progress, created a large gap between actual and planned progress on the CQ032 Project Progress Curve. This gap steadily increased from 1.9% in September 2012 to its present 29.1%. With the recent removal of the access restraints and the contractor's continued good progress in the Open Cut, the contractor has been able to slow the acceleration of this gap, however.

<u>Concerns and Recommendations</u>: The contractor has proven its ability to perform the work in accordance with the project schedule in the Open Cut. Nonetheless, until the re-baselined schedule is established, the PMOC will remain concerned about the gap in the "planned versus

actual" construction progress and the subsequent financial impacts such a gap may produce. Based on this concern, the PMOC recommends that the parties place a higher priority on the negotiations for the re-baselined schedule and complete them as soon as possible. [Ref: ESA-105-Mar13]

CQ039 Contract - Northern Boulevard Crossing

<u>Status</u>: The Estimate at Completion increased to \$103,784,000. The MTACC's forecast for Substantial Completion slipped by an additional 2 weeks, to September 5, 2013. This date was not met. At present, because of the unpredictability of the aforementioned pneumatically applied concrete (PAC) and ground thaw issues, it is not possible to accurately predict a revised Substantial Completion date. Actual progress for August 2013 was 0.2% versus 0.0% planned (project was supposed to be complete). As of August 31, 2013, cumulative construction progress was 96.7% actual versus 100.0% planned. This contract is not on the overall project critical path.

	1		2		3	4	5	6
	Original Baseline		Current Approved Baseline		nange to Priginal (2 – 1)	EAC / Forecast	Change to Original (4 - 1)	Change to Current (4 - 2)
Contrac Cost	t \$84.9 (Awa				\$14.3M -16.8%	+\$103.8M	+\$18.8M +22.1%	+\$4.5M +4.5%
Schedule SC Date		5/11 0	11 08/01/12			9/5/13		
Duration (NTP - SC)		10S. 3	0 mos.	+10 mos. +50.0%		43 mos.	+23 mos. +115.0%	+13 mos. +65.0%
Perc Com				s. Actual		l – 6 mos.	Avg. Req'd	. Progress
Plan	Actual	Total	al Avg./m		Total	Avg./mo	Contract SC	Actual
100.0%	96.7%	30.1%	2.5%		2.4%	0.4%	(N.A past date)	See note below [*]

From August 2013 ESA Monthly Report

* Awaiting natural ground thaw prior to compensation grouting, after which Substantial Completion will be declared. At present, there is no projected date for when the ground will be completely thawed.

<u>Construction Progress</u>: Overhead BMT loads were transferred to the new Northern Boulevard Crossing and the four remaining support columns in the crossing were removed during July 2013. The natural ground thaw process also continued throughout the quarter, but no other construction progress was made.

<u>Observations/Analysis</u>: All contract work except for compensation grouting (which can't be done until after the ground is completely thawed) and demobilization is complete.

<u>Concerns and Recommendations</u>: The PMOC has some concern that the longer the PAC and ground thaw issues continue, the more negative impact will be incurred financially. Due to the unpredictability of both issues, however, the PMOC recognizes that the MTACC has taken appropriate steps to mitigate these issues as much as possible.

Harold Interlocking Contracts

CH053 Contract - Harold Structures Part 1 and G.0.2 Substation

Status: The Estimate at Completion increased to \$299,299,000 during the 3Q2013. The MTACC continues to revise its forecast Substantial Completion date which is now June 24, 2014, as of the August 2013 ESA Monthly Report. Actual construction progress through August 2013 was 2.1% vs. 0.0% planned (project was supposed to be complete). Cumulative construction progress through August 31, 2013, was 82.4% actual vs. 100.0% planned. This contract is not on the overall ESA project critical path.

	1		2		3		4	5	6
	Original Baseline	Appro	Current Approved Baseline		Change to Original (2 - 1)		EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)
Contract	\$137.30N	1 \$223.2N	\$223.2M		+\$85.9M		99.3M	+\$162.0M	+\$76.1M
Cost	(Award)				+62.6%			+118.0%	+34.1%
Scheduled	05/05/10	01/16/	01/16/12				6/24/14		
SC Date									
Duration	28 mos.	48 ma	48 mos.		+20 mos.		78 mos.	+50 mos.	+30 mos.
(NTP -				+7	1.4%			+178.6%	+62.5%
SC)									
Percent (Complete	Actual - 12 m		nos. Act		ual - 6 mos.		Avg. Req'd. Progress	
Plan	Plan Actual		Avg./mo		Tota	1	Avg./mo	Contract	Forecast SC
								SC	
100%	100% 82.4%		15.5% 1.3		3% 7.4%		1.2%	N/A –	2.0%/mo.
								Past Due	2.070/IIIO.

From August 2013 ESA Monthly Report

<u>Construction Progress</u>: During 3Q2013, the CH053 contractor resumed construction of the Tunnel A Approach Structure (installed secant piles for SOE and trough), continued construction of bridge abutments for future installation of ML4 bridges at 43rd and 48th streets, continued to install 12kV ductbank and catenary structures at various locations in Harold Interlocking, continued construction of the 43-S2 retaining wall, and resumed micro-tunneling operations at Runs 1-4 and Run 12.

<u>Observations/Analysis</u>: Although the contractor continues to progress its work, nonetheless it remains well behind schedule (at least 4 years).

Concerns and Recommendations:

The PMOC recommends that the ESA PMT,

contractor, and the railroads continue to work together to maintain a dependable supply of Force Account support and reduce the number of unanticipated times when adequate support is not available.

CH054A Contract - Harold Structures Part 2A

<u>Status</u>: The Estimate at Completion increased to \$73,405,000 during 3Q2013. The MTACC's forecast Substantial Completion date was extended to May 29, 2014, a 2 month increase. Actual construction progress for August 2013 was 2.0% vs. 0.0% planned (project was supposed to be complete). As of August 31, 2013, cumulative construction progress was 56.6% actual vs. 100.0% planned. This contract is not on the overall ESA critical path.

	/	1		2	2		3	4	5	6
		Original Baseline				(hange to Driginal (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 - 2)
Contra Cost		\$21.80 (Awar		\$44.	3M		-\$22.5M -103.2%	\$73.4M	+\$51.6M +236.7%	+29.1M +65.7%
Schedul SC Dat		12/21/1	10	12/21/10				5/29/14		
Duratio (NTP - S		16 mo	s.	16 n	105.	(n	o change)	58 mos.	+42 mos. +262.5%	+42 mos. +262.5%
Percent	t Co	mplete		Actual - 12 mos.			Actual - 6 mos.		Avg. Req'd. Progress	
Plan	A	ctual		Total	Total Avg./m		Total	Avg./mo	Contract SC	Forecast SC
100.0%	5	56.6%]	19.3%	1.6%	ó	13.7%	2.3%	(N.A past date).	5.4%

From August 2013 ESA Monthly Report

* PMOC projection based on percentages contained in MTACC August 2013 Monthly Report.

<u>Construction Progress</u>: The CH054A contractor continued to install the 12kV ductbank system, including manhole installation and micro-tunneling, at various locations in Harold Interlocking, continued to make signal bridge modifications for the "F1" Interlocking cutover, and continued construction at the 43-S1, Thomson S-1, and Thomson S-2 retaining walls.



<u>Concerns and Recommendations</u>: The PMOC is concerned that further delay in the re-design of the 12kV ductbank will result in corresponding delay in CH054A construction and resultant increase in cost. The PMOC therefore recommends that the MTACC and the GEC work together to finish the re-design as quickly as possible.

Systems Contracts

VH051A (Part 1) - Harold and Point Central Instrument Locations (CILs)

<u>Status</u>: The Estimate at Completion is \$32.59M through August 2013. Forecast Substantial Completion remained the same. Actual Progress through August 2013 was 60% versus 59% planned.

	1		2	3	4	5	6
	Original Baseline	Арј	rrent proved seline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 – 2)
Contract Cost	\$30.89M (Award)	\$30	0.72M	-0.17M -0.6%	\$32.59M	1.7M 5.2%	1.87M 6.1%
Scheduled SC Date	06/25/12	06/	/25/12		07/31/15		
Duration (NTP - SC)	37 mos.	37	37 mos. + 0mos. (+0%)		74 mos.	37 mos. 100.5%	37 mos. 100.5%
Percent Co	Percent Complete Actual - 12 mos				- 6 mos.	U	'd. Progress
Plan 2 59%	Actual 7 60%	Fotal -	Avg./mo	Total	Avg./mo	Contract SC (N/A)	Forecast SC

From August 2013 ESA Monthly Report

Construction Progress:

CILs for POINT, H4, H3, and H5 have been delivered. H6 and 30 locations are being completed and prepared for factory acceptance testing. Submittals for the H2 and H1 locations are under review.

Observations/Analysis:

Locations for CIL placement need to be prepared in order to set the delivered CILs.

Concerns and Recommendations:

The PMOC recommends that locations for delivered CILs be prepared as quickly as possible.

VH051B (Part 2) - Harold Tower Supervisory Control System (HTSCS)

<u>Status</u>: The Estimate at Completion was \$9.1M through August 2013. Forecast Substantial Completion remained the same. Actual Progress through August 2013 was 88% versus 98% planned.

	1		2	3	4	5	6
	Origina Baselino	e Ap	irrent proved seline	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 - 2)
Contract Cost	\$7.10M (Award)		3.10M	+\$1.00M +14.1%	\$9.1M	+\$2M +28%	\$1M 12.3%
Scheduled SC Date	08/24/10	08/	/24/10		12/30/13		
Duration (NTP - SC)	18 mos.	18	mos.	+0 mos. 0%	58 mos.	+40 mos. +222%	+40 mos. +222%
Percent Co	Percent Complete		ual - 12 nos.	Actua	ll - 6 mos.	Avg. Req'd. Progress	
Plan 98%	Actual 88%	Total	Avg./m	o Total	Avg./mo	Contract SC (N/A)	Forecast SC

From August 2013 ESA Monthly Report

Construction Progress:

GATE, F2, and existing F north interlocking are currently operating on FHACS as the back-up system for PSCC. Testing of the system for the FHACS/HTSCS in-service of existing POINT and existing Harold Interlockings is continuing.

Observations/Analysis:

Timely updates of the software to implement graphics changes are required in order to support the schedule.

Concerns and Recommendations:

The PMOC is concerned that substantial completion slipped three months in the last quarter and recommends that the project keep software changes related to graphical displays at a minimum.

Railroad Force Account Construction Packages

Harold Stage I Amtrak FA (FHA01)

Status: The Estimate at Completion for FHA01 increased slightly to \$16,824,000. The MTACC forecast Substantial Completion date was extended by 6 weeks and is now June 24, 2014. Actual progress for August 2013 was 1.2% vs. 1.3% planned. As of August 31, 2013, the cumulative construction progress was 91.6% actual vs. 93.7% planned. The work in this Stage is not on the overall ESA critical path.

<u>FHA01</u>	1		2	3	4	5	6
	Original Baseline	App	rent roved line*	Change to Original (2 – 1)	EAC / Forecas	t Change t to Origina (4 – 1)	to d Current
Contract Cost	\$9.50M	\$16.	80M	+\$7.30M +76.8%	\$16.8M	+\$7.3M +76.8%	
Scheduled SC Date	09/30/10	01/0	03/12		6/24/14		
Duration (NTP - SC)	39 mos.	54 1	nos.	+15 mos. +38.5%	84 mos.	+45 mos +115.4%	
Percent (Complete	Actual -	12 mos.	Actual	- 6 mos.	Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
93.7%	91.6%	11.0%	0.9%	5.0%	0.4%	N/A – Past Due	0.9%/mo.

From August 2013 ESA Monthly Report

*The term "re-baseline" is a misnomer with Force Account work. In Amtrak's case, the "original baseline" has increased to account for the scope changes as detailed in the Project Initiations (PIs) that have been executed for Stage 1. It is presented in the above table to be consistent with the contract tables contained elsewhere in this report.

<u>Construction Progress</u>: During September 2013, Amtrak Electric Traction (ET) personnel continued to make signal power and catenary wire transfers at various locations in Harold Interlocking.

<u>Observations/Analysis:</u> Amtrak ET personnel have been able to "keep up" with all 2013 program elements.

<u>Concerns and Recommendations</u>: The PMOC recommends that Amtrak ET continue to make progress on the ESA program in the same manner that it has for the last 21 months.

Harold Early Stage 2 Amtrak FA (FHA02)

Status: The Estimate at Completion for FHA02 increased slightly to \$41,684,000 during 3Q2013. The MTACC's forecast for Substantial Completion slipped an additional 3-1/2 months to March 5, 2015. Actual progress for August 2013 was 1.9% vs. 2.2% planned. As of August 31, 2013, cumulative construction progress was 69.2% vs. 69.3% planned.

FHA02	1	2		3	4	5	6
	Origina Baselin		oved	Change to Original (2 – 1)	EAC / Forecas	t Change t to Origina (4 - 1)	to al Current
Contract Cost	\$9.70M	[\$38.	6M	+\$28.9M +297.9%	\$41.7M	+\$32.0N +329.99	
Scheduled SC Date		08/30	0/14		3/5/15		
Duration (NTP - SC)	58 mos	. 69 n	105.	+11 mos. +19.0%	76 mos.	+18 mos +31.0%	
Percent	Complete	Actual -	12 mos.	Actual -	6 mos.	Avg. Req'd. Progress	
Plan	Actual	Total	Avg./mo	o Total	Avg./mo	Contra ct SC	Forecast SC
69.3%	69.2%	24.5%	2.0%	17.4%	2.9%	2.9%	1.7%/mo.

From August 2013 ESA Monthly Report

*The term "re-baseline" is a misnomer with Force Account work. In Amtrak's case, the "original baseline" has increased to account for the scope changes as detailed in the Project Initiations (PIs) that have been executed for Stage 2. It is presented in the above table to be consistent with the contract tables contained elsewhere in this report.

<u>Construction Progress</u>: Amtrak Communication and Signals (C&S) personnel continued to make cable revisions and terminations and performed testing for the "F1" Interlocking cutover, which is scheduled for the weekend of November 1-3, 2013. Additionally, Communication personnel continued to install the redundant cable route between the "F1" CIH and Q and Harold Towers.

<u>Summary Observation</u>: To date, the early Stage 2 work has been concentrated on the C&S cutover of "F1" and "F2" Interlockings. "F2" was cutover earlier this year and Amtrak is on schedule for the cutover of "F1". Overall, actual construction progress is only 0.1% behind planned progress with slightly over 2/3 of the work complete.

<u>Summary Concerns and Recommendations</u>: The PMOC recommends that Amtrak and the ESA PMT continue to progress the remainder of the early Stage C&S work in the same manner they have done the first 2/3 of it.

Harold Early Stage 3 Amtrak (FHA03)

<u>Status</u>: The ESA PMT and Amtrak authorized the early Stage 3 Project Initiation (PI) in July 2013 to fund Amtrak's removal and reconstruction of Lines 2 and 4 (approximately 1,000 LF each) during the summer track outage during which the CQ031 contractor installed concrete slabs under the tracks. The slabs will support the tracks when a future contractor installs a "jacked box" tunnel for the Westbound Bypass structure. The summer outage involved 24 hour per day absolute use of track for Line 2 during the first two weeks and Line 4 for the last two weeks. The outage started on July 19 and was completed on August 19, 2013. All work was completed on schedule. Since all early work was started and completed within the 3Q2013, the PMOC will not produce a progress table until additional Stage 3 work is authorized. Amtrak Stage 3 construction is not on the overall ESA critical path.

<u>Observations/Analysis</u>: All Amtrak trackwork was completed on schedule. It was well planned and coordinated among the ESA PMT, the CQ031 contractor, LIRR, and Amtrak. This was one of the primary reasons why the project was a success. The PMOC understands that the ESA PMT is planning similar 24/7 outages in future years.

<u>Concerns and Recommendations</u>: The PMOC recommends that the project participants continue to build on the process and relationships that made the success of this facet of the program possible.

Harold Stage 1 LIRR FA (FHL01)

<u>Status</u>: The Estimate at Completion for FHL01 increased slightly to \$21,972,000 during the 3Q2013. The MTACC extended its forecast for Substantial Completion to October 29, 2014, an increase of 2-1/2 months over its 2Q2014 projection. Actual progress for August 2013 was 0.0% vs. 0.0% planned. As of August 31, 2013, cumulative construction progress was 75.2% actual vs. 75.2% planned.

<u>FHL01</u>	1		2	3	4	5	6
	Origin Baselir	ne Ap	urrent proved seline*	Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 - 2)
Contract Cost	\$28.80	M \$2	20.80M	-\$8.00M -27.8%	\$22.0M	-\$6.8M -23.6%	+\$1.2M +5.8%
Scheduled SC Date	09/30/1	10 10)/10/11		10/29/14		
Duration (NTP - SC)	39 mos	s. 5	2 mos.	+13 mos. +33.3%	86 mos.	+47 mos. +120.5%	+34 mos. +65.4%
Percent C	omplete	Actua	l - 12 mos.	Actual	- 6 mos.	Avg. Req'd.	Progress
Plan	Actual	Total	Avg./mo	Total	Avg./mo	Contract SC	Forecast SC
75.2	75.2%	1.8%	0.2%	0	0	N/A – Past Due	1.9%/mo.

From August 2013 ESA Monthly Report

*The term "re-baseline" is a misnomer with Force Account work. In LIRR's case, the "original baseline" has increased to account for the scope changes as detailed in the Memoranda of Understandings (MOUs) that have been executed for Stage 1. It is presented in the above table to be consistent with the contract tables contained elsewhere in this report.

<u>Construction Progress</u>: The LIRR did not make any progress on FHL01 during this quarter. All construction efforts were concentrated on Stage 2 cutover of Point Interlocking and early Stage 3 track removal and re-construction in conjunction with the CQ031 concrete slab installation.

<u>Observations/Analysis</u>: The PMOC notes that approximately ¹/₄ of the LIRR work in Stage 2 remains.

<u>Concerns and Recommendations</u>: The PMOC recommends that the LIRR resume Stage 1 construction as soon as possible after the completion of the Point Interlocking Stage 2 work.

Harold Early Stage 2 LIRR FA (FHL02)

<u>Status</u>: The Estimate at Completion increased to \$65,866,000 during 3Q2013. The MTACC's forecast for Substantial Completion was extended an additional 10 months to September 11, 2016. Actual progress for August 2013 was 1.2% vs. 1.3% planned. As of August 31, 2013, cumulative construction progress was 27.9% actual vs. 28.0% planned.

<u>FHL02</u>	1	2		3	4	5	6
	Original Baseline	Current Approved Baseline*		Change to Original (2 – 1)	EAC / Forecast	Change to Original (4 – 1)	Change to Current (4 - 2)
Contract Cost	\$7.40M	\$24.	6M	+\$17.2M +232.4%	\$65.9M	+\$58.7M +790.5%	+\$41.3M +167.9%
Scheduled SC Date	11/30/15	11/30	0/15		9/11/16		
Duration (NTP - SC)	75 mos.	75 n	108.	+0 mos. 0.0%	85 mos.	0 mo. 0.0%	+10 mos. +13.3%
Percent (Complete	Actual -	12 mos.	Actual	- 6 mos.	Avg. Req'd	. Progress
Plan	Actual	Total	Avg./m	o Total	Avg./mo	Contract SC	Forecast SC
28.0%	27.9%	8.1%	0.7%	4.3%	0.7%	1.8%	2.1%

From August 2013 ESA Monthly Report

*The term "re-baseline" is a misnomer with Force Account work. In LIRR's case, the "original baseline" has increased to account for the scope changes as detailed in the Memoranda of Understandings (MOUs) that have been executed for Stage 2. It is presented in the above table to be consistent with the contractor tables contained elsewhere in this report.

<u>Construction Progress</u>: During the 3Q2013, LIRR C&S personnel continued to install conduits, install and terminate signal cables, test circuits, and make circuit revisions at various locations in existing Harold Interlocking and the new Point Interlocking.

<u>Summary Observation</u>: LIRR cumulative C&S construction remained on schedule throughout 3Q2013, but the ET cutover of the signal power separation, which was scheduled to occur this quarter, has been delayed until mid-4Q2013.

<u>Summary Concerns and Recommendations</u>: The PMOC recommends that the ESA PMT and LIRR ET work together to complete the signal power separation as soon as possible. This will make it possible to remove all the existing signal towers which presently prevent the start of construction of new track ML4.

Harold Early Stage 3 LIRR F/A (FHL03)

<u>Status:</u> The ESA PMT and the LIRR authorized the early Stage 3 Memorandum of Understanding (MOU) in July 2013 to fund LIRR's removal and re-construction of Lines 2 and 4 (approximately 900 LF each) and installation of 2 track turnouts during the summer track outage noted in FHA03, above. The MOU also authorized installation of 3 track turnouts after the outage. All LIRR trackwork was completed on schedule. Since all early work was started and completed during 3Q2013, the PMOC will not produce a progress table until additional LIRR Stage 3 construction is authorized. LIRR Stage 3 construction is not on the overall ESA critical path.

<u>Construction Progress:</u> LIRR Track personnel removed and re-constructed approximately 900 LF of track each on Line 2 and Line 4 in Harold Interlocking during the outage. Additionally, LIRR installed 2 turnouts during the outage and 3 others after the outage.

Observations/Analysis: All the LIRR trackwork was completed on schedule. It was well planned and coordinated among the ESA PMT, the CQ031 contractor, Amtrak, and LIRR. This greatly contributed to the success of the project. The PMOC understands that the ESA PMT is planning similar 24/7 outages for future years.

<u>Concerns and Recommendations</u>: Although the early Stage 3 trackwork went smoothly, the PMOC remains concerned that the LIRR takes too long to complete its project Site Specific Work Plans (SSWPs). The LIRR produced 5 separate SSWPs for the work listed above, none of which were completed until the day before construction was to begin. This will not be acceptable with the more aggressive track programs in future years. Since all scheduled LIRR trackwork is complete for 2013, the PMOC recommends that the LIRR begin development of its 2014 SSWPs immediately. [Ref: ESA-101-Dec12]

2.4 Operational Readiness

A Quarterly Operational Readiness meeting was held on September 26, 2013. There were several topics discussed at the meeting including: status of operational readiness documents; asset management plan; and a report on safety certification activities during the 3Q2013. ESA is currently interviewing a replacement candidate for the ESA Operational Readiness Program Manager who resigned earlier in the summer.

Current Status-ESA Operational Readiness Documents

The draft of Volume 2 (tasks and activities) of the Rail Activation Plan is being reviewed by the railroads and is expected to be released in the 4Q2013. The draft outline of Volume 3 of the Rail Activation Plan (Monitoring and Verification) is complete. Rail Activation Task Groups continue to focus on Early Start Activities (those activities that need to occur before the end of 2014).

Asset Management Plan

The Operational Readiness Group in conjunction with the LIRR IT Department has completed development of the asset inventory templates. The Group is currently reviewing the asset listing for Contract repackaging and is updating the listing as Contracts are repackaged. The Operational Readiness Group is populating the templates with preliminary Asset Inventory data; developing a training presentation for the Contractors; and will begin distributing updated templates with Asset Inventory data to the Contractors.

Quarterly Report on Safety Certification Activities

This item is discussed in Section 1.5 above.

Observation:

The Operational Readiness group continues to progress activities comprising system start-up and commissioning.

Concerns and Recommendations:

The Operational Readiness Group Program Manager was a driving force in establishing the Operational Readiness Program. Although he has established a good Operational Readiness team and has established an effective process, the PMOC remains concerned that unless an equally qualified and motivated person is found as a replacement, the momentum that has been established may start to dissipate. It is encouraging that the ESA Project Office has identified a potential candidate to fill the Operational Readiness Program Manager position. This is a key position that needs to be filled by a qualified candidate as soon as possible.

2.5 Vehicles

Status:

The M-9 RFP process consisted of two phases: Phase 1 was a pre-qualification step that was advertised on June 5, 2012. Phase II consists of receiving the Technical and Pricing proposals from qualified proposers, which were initially due in January 2013, but due date was extended until April 4, 2013 These cars will initially be part of the M-3 replacement program and will be used for ESA when it comes on line. This procurement does not use federal funding). The following is the latest procurement milestone schedule:

- Proposals received April 4, 2013
- Car builder meetings on June 10 26, 2013
- BAFO requests went out July 26, 2013 (target date was July 15, 2013)
- BAFOs received August 12, 2013 (target date was August 5, 2013)
- Board Approval received and Notice of Award executed September 18, 2013

Observation:

There was a slight slippage in the BAFO request and submittal dates.

Concerns and Recommendations:

There are no significant concerns at this time. The PMOC will continue to monitor the procurement schedule.

2.6 Property Acquisition and Real Estate

Status/Observation:

The expected meeting with the 48th Street Entrance property owners in August 2013 has not yet taken place – although technical staff has been coordinating the proposed design with the property owners' technical staff.

280 Park Ave:

An easement agreement which allows MTACC to construct a portion of the elevator structure has been executed.

335 Madison Ave:

There has been no movement on the meeting to discuss the technical details of the Biltmore elevator yet.

Easements:

Extensions of two easements in Queens are being negotiated.

- 48-39 Barnett Ave East (Block 119 Lot 150)

- 39-10 43rd Street (Block 183 Lot 332)

# of Parcels Identified	# Parcels Closed	# Parcels Under Contract	# Parcels In Negotiation	# Parcels In Appraisal	# Parcels In Condemnation	# Parcels Right of Occupancy
126	117	0	5	3	0	2

Concerns and Recommendations:

The PMOC remains concerned about the length of time it is taking to finalize all of the Real Estate aspects of the 48th Street Entrance to GCT; however, this activity is currently not on the project critical path.

2.7 Community Relations

Status:

During August 2013, the ESA project convened its Community Outreach with a Kick-Off meeting with the construction management team and the contractor for the Manhattan South Structures (CM005) contract. It organized and held a community relations cavern tour for businesses and property owners in areas affected by ESA project work. It performed extensive outreach to neighborhoods, elected officials and community groups in the Queens area adjacent to the ESA work sites. The outreach included door to door flyers, a printed and mailed newsletter, email notifications, and phone calls to elected officials and community groups. The ESA Community Relations team met with and briefed the new District Manager for Manhattan Community Board 6; It assisted with coordination of attendance of elected officials for Arts for Transit's first round panel meeting for the selection of artwork for the Roosevelt Island Vent Facility gates; and oversaw the installation of information and way finding signage for businesses impacted by work on the 44th Street Ventilation Facility the 44th Street Demolition & Construct Fan Plant Structure & 245 Park Ave. Entrance (CM004) contract.

Observation:

The PMOC believes that the ESA Community Relations staff, working with the ESA Construction Managers and MTACC management, is reaching out appropriately and effectively to inform Manhattan and Queens communities of upcoming construction work and planned changes, and has properly handled concerns and complaints from the community.

Concerns and Recommendations: There are no significant concerns at this time.

3.0 PROJECT MANAGEMENT PLAN AND SUB PLANS

3.1 Project Management Plan

Status:

The Grantee updated the Project Management Plan (PMP) and issued Rev. 9 on June 28, 2013. The PMOC completed its review of the revised PMP in August 2013 and incorporated the FTA comments in September 2013.

Observation:

MTACC utilized a task force approach to updating the PMP and Candidate Revisions to the PMP were presented to the CCC for review and approval. However, they were presented to the CCC after the PMOC had already reviewed them; that is the wrong order.

Concerns and Recommendations:

There are no specific PMOC concerns or recommendations at this time. Candidate changes to the PMP should not be in the revision given to the FTA and PMOC for review until after they have been approved by the CCC.

3.2 PMP Sub-Plans

Status: The status of the key sub-plans is discussed in the ELPEP section of this report.

3.3 Project Procedures

<u>Status</u>: In November 2012, the MTACC indicated to the PMOC that it had completed development of all procedures that it intended to revise. As of September 30, 2013, the total count of revised ESA procedures stands at 77.

<u>Observations</u>: In the PMOC's opinion, the MTACC has developed all the revised procedures necessary to support its revised Project Management Plan (PMP). The PMOC had recommended that the MTACC then develop a schedule that shows for which procedures training will be conducted and who will receive this training. As a result of this recommendation, MTACC developed a schedule of training for applicable procedures and conducted training on six dates during the third quarter of 2013 as shown in the following table:

Date of Training	Number of Procedures Covered	Number of Participants Trained
07/11/13	8	58*
07/24/13	6	54*
08/07/13	7	45
08/21/13	1	50
09/04/13	7	46
09/19/13	9	37

* The PMOC attended these two sessions

Concerns and Recommendations:

MTACC began full-scale procedures training for its project management personnel during 3Q2013. The PMOC attended the workshops for this training (which it found entirely satisfactory) and recommends that the MTACC continue such training until all personnel are fully trained.

4.0 PROJECT SCHEDULE

Status:

The PMT did not submit its IPS#50 this month, and stated in its monthly report that "ESA continues its program level review with a target for issuing a revised draft baseline for review in September 2013. Until such time as that re-baseline is issued, the monthly schedule report will only contain narrative and simple start, finish dates for active contracts." The PMOC notes that the PMT missed its commitment to have a draft re-baseline completed by mid-September 2013.

The PMT has also stated in its variance report that contract CM006's schedule has been incorporated based upon results of the recent risk workshop and input from a peer review, and reflects the Access Restraints and Milestones included in the package that was recently issued for bid." Additionally, ESA has used a 34 month duration for this Contract with an interim milestone to turn over the lower level set at 24 months following NTP. This interim milestone will allow the start of CM007 work in both caverns, as well as the start of CS179 in the tunnels.

In addition to the revised packages in Manhattan, the work in Harold continues to be coordinated, including repackaging remaining work, and potentially shifting scope between contracts. These changes are intended to be incorporated in the proposed draft plan referred to above.

Table 1 in appendix H shows all future packages design, procurement and construction schedule. It should be noted that ESA has not provided a schedule for some key contracts, e.g., CM007 and CS179.

Observation and Analysis

With the development of a "top down" schedule for Contract CM007, the original contract schedule duration of 42 months for CM012R has become 69 months because contract CM005 has a scheduled NTP of September 9, 2013, and S.C. for contract CM007 (the last of three packages) is July 5, 2019 (although it should be noted that ESA has given some portion of work from CM012R as change orders to contracts CM009, CQ032, and CM004, which has not been counted in this duration calculation).

The following table shows ESA's July 2012 baseline schedule's critical path which was going through contracts CM012R (42 months), then some portion of contract CS179 (only 8 months of total contract duration) the IST (15 months), and finally LIRR IST (3 month), and finally 365 days of contingency at the end. Given that the ESA Project Office will not provide an IPS update at this time, the PMOC re-assembled the project critical path using the same logic with the same amount of contingency and the changes noted above, and arrives at a forecast date for RSD of August 20, 2022.

Contract	Start	Duration	Finish
CM012	9/1/2013	1620	2/7/2018
CM005	9/9/2013	877	2/3/2016
CM006	2/1/2014	1037	12/4/2016
CM007	4/7/2016	1184	7/5/2019
CS179	7/5/2019	242	3/3/2020
IST	3/3/2020	445	5/22/2021
LIRR IST	5/22/2021	90	8/20/2021
Cont.	8/20/2021	365	8/20/2022

Table 4.1: proposed ESA's critical path

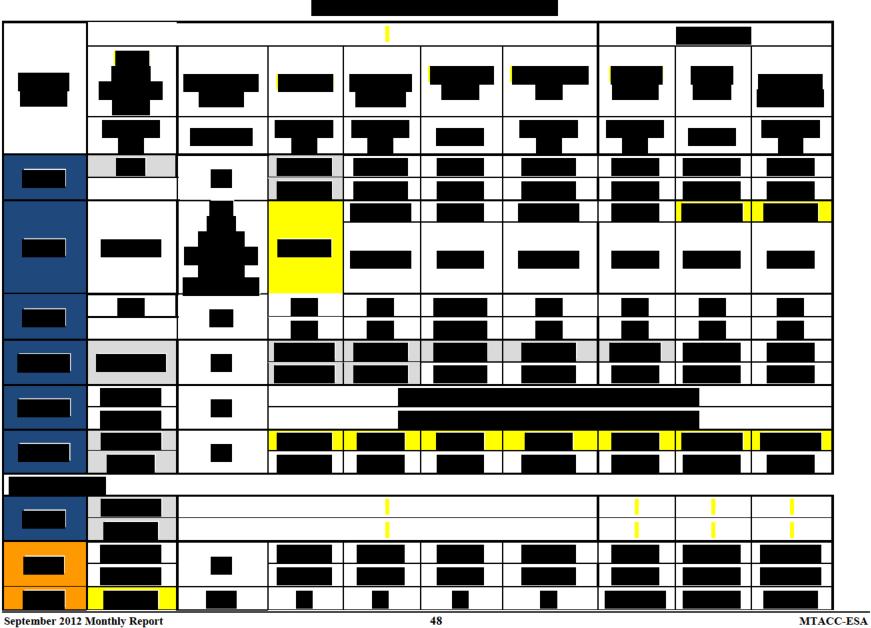
Procurement delays for awarding contracts CM006, CM007, and CS179 are significant risk factors for this RSD. Additionally ESA has not developed detailed interface milestone dates for Contracts CM005, 006, 007, CM014B, and CS179. There are about 40 milestones among these contracts and access restraints are one of the major construction risks.

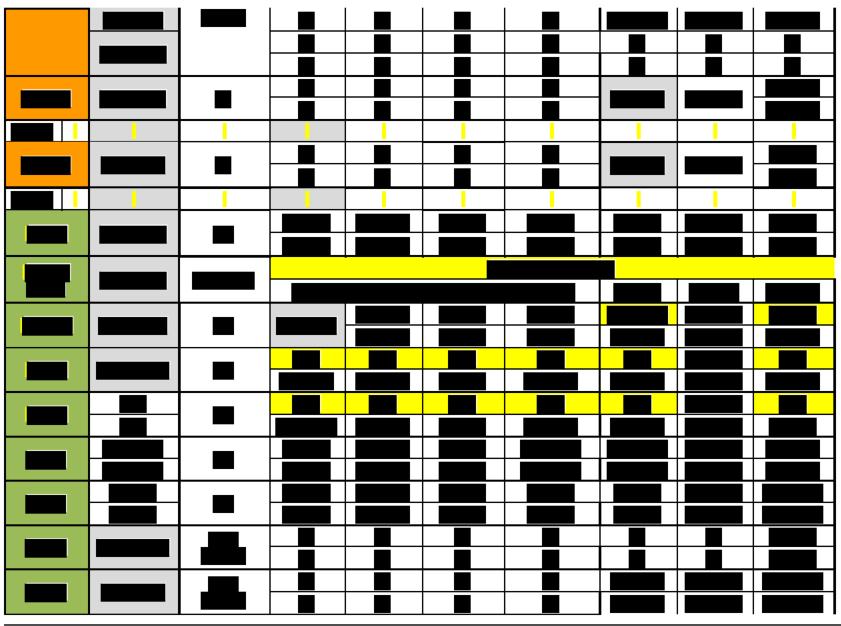
Concerns and Recommendations

The PMOC continues to recommend that ESA re-evaluate the project baseline schedule approved in 2012, taking into account the impacts of the CM012R repackaging and the significant procurement delays re-baseline and also develop a new basis of schedule as soon as possible. [Ref: ESA-109-Jun13].

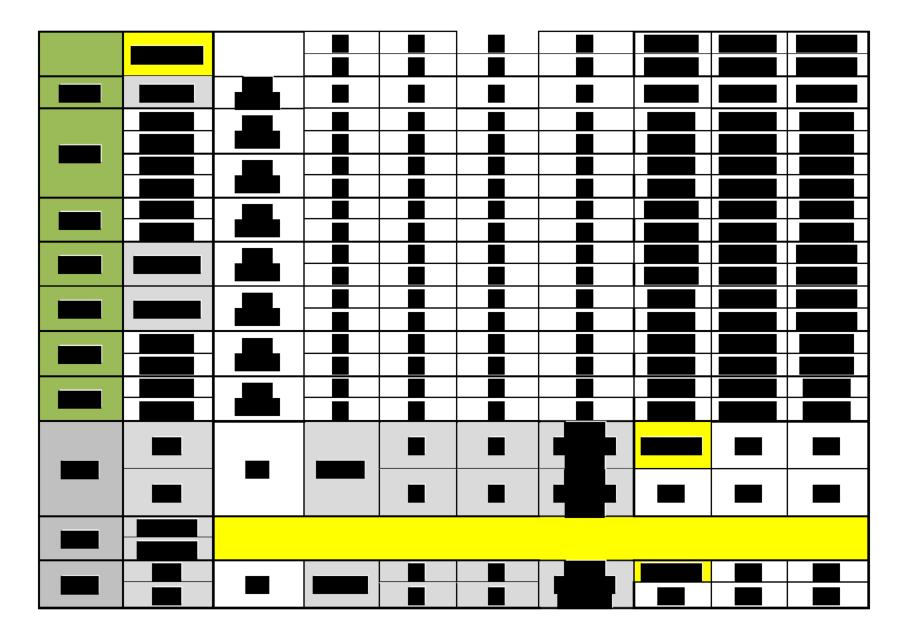
Additionally the PMOC recommends that the ESA uses its 4-D model to run "clash detection" among all interfaced contracts to evaluate its IPS validity. The PMOC notes that this capability would make the risk assessment process more meaningful and would provide useful information for coordination among various Contracts/Contractors who will be working the same areas.

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5.0 PROJECT COST

Note: All references to expenditures in this report are with respect to the current cost baseline that was agreed upon at the MTA CPOC meeting in May 2012.

5.1 Budget/Cost

		1			8		
Standard Cost Category (SCC) No.	FFGA SCC baseline (YOE \$) M	July 2, 2012 Re-baseline (YOE \$)	June 2013 SSC (YOE \$) M	August 2013 SSC (YOE \$) M	August 2013 % of Re-baseline	June'13 to August '13 Change \$M	CBB Variance from FFGA %
10	1,989	2,943	3,073	3,099	105.30%	156	55.81%
20	1,169	1,514	1,366	1,410	93.13%	-104	26.95%
30	356	388	393	332	85.57%	-56	-6.74%
40	205	488	522	513	105.12%	25	153.66%
50	619	698	677	677	96.99%	-21	9.37%
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	27.84%
100	1,036	1,116	1,116	1,116	100.00%	0	7.72%
Total Project Cost	7,849	9,824*	9,824	9,824	100.00%	0	25.19%

Table 5.1: 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:

SCC 10 – Transfer of budget for signal bridges from CH053 to CH057 and CH057A. These packages have differing percentages of SCC code 10 in them.

SCC 20 – CM012 funds transferred to new package CM006. This also included a transfer of funds from CQ033 to CM006 which has a different SCC code makeup from CM012 and CM006.

SCC 30 – CM012 funds transferred to new package CM006. This also included a transfer of funds from CQ033 to CM006 which has a different SCC code makeup from CM012 and CM006.

SCC 40 – Transfer of budget for signal bridges from CH053 to CH057 and CH057A. These packages have differing percentages of SCC code 40 in them.

Observations:

The re-packaging of scope, principally related to the CM012R scope, has led to movement of costs across Standard Cost Category (SCC)s. This is due to ESA's initial cost coding of work by package rather than by type of work, which is the basis of the SCC. When ESA moves scope from one package to another, that scope carries with it the pro-rata percentage of SCCs in that package, irrespective of the scope's type of work. So as scope is shifted back and forth between

packages, its proper cost coding become unrecognizable. The PMOC believes that PMT should take the opportunity to properly align the SCCs as part of the project re-baselining effort.

Although ESA continues to show in its cost reports that the Current Baseline Budget is being held, it is having difficulty keeping the SCCs at this baseline level as seen in its deletion of CM007 from the PWE Budget and in ESA just stating TBD for the Forecast Values on its budget. The ESA PMT has acknowledged at recent cost review meetings that the overall project budget needs to be re-evaluated, but they will most likely not be able to do this until later in 2013. The PMOC advised the PMT that the CMP calls for budget forecasting. At the June 2013 Cost Review meeting, the ESA Project Executive informed FTA/PMOC representatives at the meeting that he was aware that this failure to officially adjust the PWE and budget and contingency forecasts resulting from the CM012R bid overrun and delayed procurements was not in keeping with the ELPEP agreement. The Cost Management Plan (CMP) states that the SCC is tied to the CSI numbering system, and both of these categories have specific definitions; therefore, after linking them, it would be impossible to change the definitions of scope included within any SCC.

Concerns and Recommendations:

The coding of work elements in the SCC should be realigned to properly reflect the costs for the type of work specified by the SCC. [Ref: ESA-106-Dec12]

As stated on several occasions, the PMOC remains concerned that MTACC is unable to assess the ESA Program budget and schedule impacts of the CM012R bid overrun more than ten months after the fact. Given the constrained funding environment that the project is in, and the commitment to provide a rebaseline/replan of the budget, it is important for MTACC and the ESA Project Office to have a clear understanding of the budget impacts and impacts to the RSD of events that have transpired over the last ten months. As stated throughout this report, the PMOC believes that the re-planning/rebaselining of the project has taken an inordinate amount of time.

5.2 Project Cost Management and Control

Status:

The PMT has reported that as of August 31, 2013, the actual total project progress was 57.5% vs. 59.9% planned progress resulting from the July 2012 re-baseline, however the actual construction progress was 54.7% vs.58.9% planned based on invoiced amount; this also represents an increase over the last quarter of 2.7% vs. the 3.1% construction progress planned, as shown in Table 5.2.

Elements	Baseline Total Budget	Current Baseline Budget (August. 2013)	Actual Awards (August 31, 2013)	Actual Invoiced (August 31, 2013)	Actual % Budget Invoiced
Construction	\$6,118,922,157	\$6,118,731,062	\$3,933,700,870	\$3,349,349,873	54.74%
Soft Costs Subtotal	\$2,126,077,843	\$2,126,268,938	\$1,446,674,638	\$1,384,098,912	65.10%
Engineering	\$671,029,379	\$671,220,474	\$633,062,625	\$628,513,576	93.64%
OCIP	\$173,913,620	\$173,913,620	\$140,223,857	\$136,584,990	78.54%
Project Mgmt.	\$762,816,530	\$762,816,530	\$571,307,441	\$523,844,508	68.67%
Real Estate	\$166,318,314	\$166,318,314	\$108,180,179	\$103,931,555	62.49%
Rolling Stock	\$202,000,000	\$202,000,000	\$0	\$0	0.00%
Project subtotal w/o Financing & RI	\$8,245,000,000	\$8,245,000,000	\$5,368,474,972	\$4,742,224,502	57.52%
Subtotal w Rolling Stock	\$8,708,000,000	\$8,708,000,000	\$5,386,474,972	\$4,742,224,502	54.46%
Regional Investment Subtotal	\$590,732,003	\$590,732,003	\$44,877,114	\$30,289,949	5.13%
Construction (RI)	\$475,016,081	\$475,016,081	\$27,727,044	\$24,490,877	5.16%
Design (RI)	24,595,433	24,595,433	\$210,872	\$31,330	0.13%
OCIP (RI)	\$16,939,198	\$16,939,198	\$16,939,198	\$5,767,742	34.05%
Project Mgmt. (RI)	\$24,181,291	\$24,181,291	\$0	\$0	0.00%
Real Estate (RI)	\$0	\$0	\$0	\$0	0.00%
Rolling Stock(RI)	\$50,000,000	\$50,000,000	\$0	\$0	0.00%
Project Subtotal w/o Financing	\$9,298,732,003	\$9,298,732,003	\$5,431,352,046	\$4,772,514,451	51.32%
Finance Charges	\$1,116,453,993	\$1,116,453,993	\$617,607,000	\$617,607,000	55.32%
Grand Total	\$10,415,185,996	\$10,415,185,996	\$6,048,959,046	\$5,390,121,451	51.75%

Table 5.2: Project Budget and Invoices as of August 31, 2013

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Observation:

The PMOC notes that ESA continues to report its Management Reserve under the Construction budget when computing Construction progress and continues to exclude rolling stock reserve in its calculation of project progress. The PMOC believes that Management Reserve is a Program reserve and should not be included in the Construction progress calculation and also that the rolling stock reserve should be included in the project progress calculation.

The PMT has often been providing package estimates for future contract packages; however what is provided often is not in formats useful for analysis. The Basis of Estimates, when provided, generally does not provide enough detail for thorough analysis, nor does it identify to the PMT's assumptions of the Estimator. For Package CM007, ESA has not provided any Cost Estimates at all, even though they provided a Top Down Schedule over one month ago. In the August 2013 PWE, the PMT totally eliminated contract CM007 from the PWE, leaving no Budget or cost projections for that work

Concerns and Recommendations:

The PMT provides monthly cost reporting data in a series of update documents provided by separate PMT staff instead of in a unified report. This lack of singular reporting responsibility and the lack of a single integrated cost document weaken the capacity for analysis and for a joint review of the cost relationships. This item has been discussed at recent cost review meetings and a working meeting with ESA PMT was to have been set up by ESA for the last several months but has not occurred. Two months ago, ESA's interim Project Controls Manager was to begin a 14 week process of developing an Integrated Cost System, but at the September 20, 2013 Cost Review meeting the PMOC was told no progress had been made and the new Project Controls Manager would be setting his own course for Reporting.

The PMOC is concerned about the lag of invoiced amount for construction and total project to date compare to the forecast amount in the projected cash flow. This continues the trend of ESA not keeping up with its monthly expenditure plans; the cash flow is currently averaging approximately only 40% of the planned value. The PMT should reforecast its monthly cash flow curve, linking it the current schedule forecast [Ref: ESA-99-Dec12]

The PMOC recommends that the MTACC's Project Control Manager submit estimates and proper documentation for review as well as a full analysis of the elements in the ESA estimate prior to each package bid date, allowing adequate time for review and comment. [Ref: ESA-107-Dec12]

5.3 Change Orders

Table 5.3 below shows the executed mods greater than \$100,000 during August 2013.

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Status/Observation:

At its last analysis, the PMOC saw that executed MODs were running over 12% of the budget for packages and when the Pending, Possible, and Potential were added, the percentage was close to 20%. ESA has not budgeted enough to cover these changes and the PMOC, without any access to the original proposed values or the negotiation processes, cannot assess the causes of or mitigations against this level of Changes. Based on the latest excel MOD Log provided to the PMOC, it appears ESA has \$188M of unexecuted MOD exposure but only holds \$70M in Post-Bid Contingency.

Concerns and Recommendations:

The PMOC recommends that the PMT perform a more thorough analysis of the change order trends and budget for them, and also prepare an analysis and outline its plan for allocated and unallocated contingency consumption. It also suggests the PMOC be invited to attend major negotiations where MODS exceed \$10M or relate to settlements. [Ref: ESA-108-May12]

5.4 Project Funding

a) Federal Funding

As shown in Table 5.2, as of August 31, 2013, the PMT has awarded a total of \$5.836B, in contract work. The Federal share of awarded contracts is \$2.030B. The total Federal funding commitment as of August 31, 2013 remained at \$2.699 billion (See Appendix G.1 for re-baseline project cash flow and Appendix G.2 for detailed cost distribution)

b) Local Funding

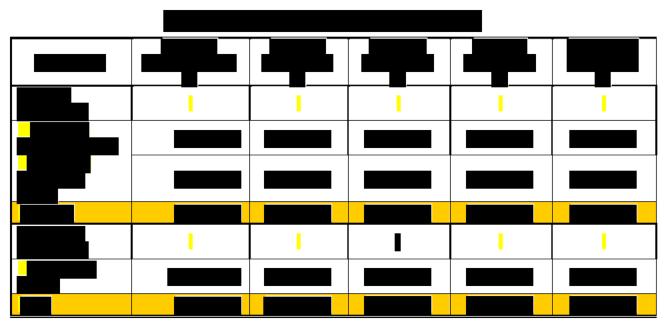
The obligated local share was \$3.536B. There has been a \$617,607,000 incurred finance cost (for local share) to date.

5.5 Cost Variance Analysis

As stated earlier, until the PMT addresses the cost variances resulting from the CM012R bid overrun and subsequent repackaging of the work in its official cost reporting, it is not possible to accurately analyze the total Program cost variance.

5.6 Project Cost Contingency

Table 5.4 below is a summary of ESA's contingency for construction, soft cost and total project cost as of August 31, 2013.



Status/Observation:

At its last analysis, the PMOC saw that executed MODs were running over 12% of the budget for packages and when the Pending, Possible, and Potential were added, the percentage was close to 20%. ESA has not budgeted enough to cover these changes and the PMOC, without any access to the original proposed values or the negotiation processes, cannot assess the causes of or mitigations against this level of changes.

[Ref: ESA-98- Sep 12]

Concerns and Recommendations:

MTACC had stated that it would not officially report on budget impacts of the CM012R bid overrun and delays of major procurements until later this year. As such, the contingency drawdown statistics presented do not accurately portray the project contingency utilization. This represents significant project cost vulnerability

The PMOC believes that the cost overrun on the cancelled CM012R solicitation should have left 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 package

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. [Ref.: ESA-112-June 13]

The

6.0 RISK MANAGEMENT

As described in the ESA Risk Management Plan, the PMT is supposed to conduct contract level risk workshops at the completion of design and factor the risk results into the contract bid packages. As a policy, each major construction package is supposed to undergo this process and the PMT is following that policy.

6.1 Risk Process

Status/Observation:

ESA has initially committed to holding Monthly Risk Review Meetings but has only achieved a bi-monthly rate to date. The last meeting was held on July 31, 2013

As stated earlier in this report, the PMT has 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 loss of key individuals creates a risk to the Technical Capacity and Capability of the PMT and the ESA project. Replacements have been found for two key positions; however, the PMT still has two key spots to fill (senior scheduler and Rail Systems Program Manager)

The MTACC stated at the last ELPEP meeting that it is implementing a third-party risk management software package called "Active Risk Management" (ARM) to control and monitor project risks. MTACC has purchased licenses to expand use of this program for its major capital projects. MTACC intends to complete the software implementation before the end of the year and will provide a presentation to the FTA and PMOC demonstrating the program's capabilities.

The systems work and associated packages (CS179, CS284, and CS084) continue to be evaluated for interface issues. ESA planned 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, and CM007. The model has not been re-run as of the end of September 2013. The current forecast is to re-run the model in October 2013. ESA is also considering modifying some of the existing work scope options in the CS179 bid package based on particular program schedule needs required to accommodate the CM012R re-packaging and funding availability.

Minimal progress has been made on producing an Integrated Master Schedule which overlays the ESA Harold work schedule on an Amtrak Program of Projects that may compete for limited resources. Amtrak provided a schedule for the Moynihan project for remaining work in 2013; however, ESA has yet to develop the framework for the Integrated Master Schedule. Given that ESA is now re-planning the remaining Harold work, the PMOC believes that it is even more critical to have the Amtrak Program of Projects in place in order to provide a more realistic evaluation of the schedule for remaining ESA Harold work.

ESA is currently working on schedule and cost estimate reviews for both the CM007 and CM014B contracts. These reviews will include updated milestone information available from the CM005 bid and the CM006 risk workshops that will revise contract interfaces and milestones in the project's IPS. The CM014B risk workshop is expected to be held after the schedule and estimate reviews are completed (earliest at this point will be late October 2013). The CM007 risk workshop is forecast for some time in the 1Q2014 and is anticipated to be done between issuance of the Request for Expressions of Interest and the Request for Proposals. ESA stated that it will not have a "bottom up" schedule developed until sometime in the 4Q2013.

The programmatic cost and schedule baselines are undergoing extensive evaluation and ESA missed its forecast date for completing a draft baseline schedule. As stated elsewhere in the report, MTACC and ESA are now stating that new schedule and cost baselines will not be ready until later in the 4Q2013. The Contract Packaging Plan (CPP) will be updated after the rebaseline is completed and, as such, there is currently no forecast date for issuing the updated CPP.

ESA is currently not planning to perform a programmatic risk assessment until sometime in early 2014. The PMOC notes that cost and schedule contingency levels are often determined on the basis of the risk assessment results; this is a standard approach to determine the contingency levels assigned to the project.

Concerns and Recommendations:

The PMOC is quite 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 reconfiguration 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.

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. ESA has reasoned that dividing the work into smaller packages could save costs. The PMOC has already seen an erosion of the potential cost savings and is concerned that the targeted cost savings will not be met. The PMOC recommends that MTACC and the ESA PMT carefully re-evaluate the preliminary estimate for the remaining construction packages.

The PMOC has some familiarity with the capabilities of the Active Risk Management (ARM) package that ESA proposes using. It is used for management of the Risk Register and tracking listed mitigations and responsibilities, which is helpful, but does not perform Risk Analysis and quantifications simulations.

6.2 Risk Register

Status/Observation:

The PMT maintains a programmatic and contract Risk Register and updates it as specific risk reviews are conducted. The last update to the project risk register was issued in August 2013.

Concerns and Recommendations:

Distribution of the Risk Register has been infrequent and ESA should automatically submit Risk Register updates to the FTA and PMOC on a regular basis (no less than monthly).

6.3 Risk Mitigations

Status/Observation:

<u>**Current Risk Mitigation Efforts</u></u>: Through September 2013, ESA-PMT continued its efforts to identify and mitigate specific risks that may adversely affect the program's cost and schedule performance. Ongoing and significant new risk mitigation initiatives include the following:</u>**

- The PMT is working in conjunction with the CM005 construction team and contractor to establish a 4-D model to serve as a tool for assessing progress, coordination, and identifying and reducing risks.
- The PMT presented a scope shift from CM015 (48th Street Entrance) to CM014B to the CCC for the transfer of work to be done in the street (utility work and structural box). This proposal was accepted in September 2013 and is intended to mitigate the risk of delays due to changes to the building being considered by the building owner.
- The PMT presented a proposal to CCC to create a new package CH057B, to allow for early work on the track at the 48th St. Bridge. Currently part of the CH057 package, this change would allow the track to be done early by an On-Call Contractor and mitigate the risk of not having the needed infrastructure in place to take advantage of an extended 2015 summer track outage supporting the construction section of the East Bound Reroute. This proposal was accepted by the CCC in September 2013.

Concerns and Recommendations:

The 4D model for the CM007 Contract presented at the August 28, 2013 meeting did not address interfaces with other contracts. In order to be a truly useful tool, the PMOC recommends that the model be updated to provide a capability to run "clash detection" among all interfaced contracts. This capability will allow for a more accurate determination of the interface risks associated with this contract and will make the results of a risk assessment more meaningful.

The PMOC is concerned that the scope shift of work from the CM015 package to the CM014B package was approved by the CCC despite the request from the MTACC Project Controls representative (who is a voting member of the Committee) to defer the vote pending receipt and review of additional information. The PMOC recommends that ESA evaluate the process in place for the CCC with a goal of addressing concerns of voting members prior to approving a change proposal.

7.0 PMOC CONCERNS AND RECOMMENDATIONS

Priority in Criticality column

1 - Critical 2 - Near Critical

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
ESA-93- June12	1.6 Quality	<u>Project Quality Manual (PQM)</u> : The latest version of the ESA Project Quality Manual (PQM), Revision 6, issued in February 2009, was found to be acceptable; however several updates to the ESA Quality Management System have been made since then. MTACC agreed that it would be beneficial to update the PQM to reflect these updates.	2
		<u>Status Update:</u> The ESA Quality Manager had committed to revise the PQM by the end of February 2013 to incorporate changes to the ESA Quality System that have occurred since 2009. This date continues to slip. A Draft of Revision 7 has been prepared and is still 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 the PQM. The date kept slipping and the September 30, 2013 date has not been met. The PMOC was told that the revision is minor and although a Draft version was requested, one has not been provided. <u>Recommendation:</u> The ESA Quality Manager is now anticipating that a Draft will be sent to the PMOC in early October but the PMOC has no reason to believe that date will be met. The PMOC continues to believe that it would be beneficial to issue Revision 7 of the PQM as soon as possible.	
ESA-95- Sep12	2.3 Construction: Queens	<u>Contract CQ032</u> : The PMOC is concerned about the potential cost and schedule impacts to the CQ032 contract resulting from the access delays created by late turnover of work areas by the CM009/019, CQ031 and CQ039 contractors. <u>Status Update</u> : The Early Access Chamber, the last work area that prevented the CQ032 contractor from gaining access to its entire work site, was turned over from the CQ039 contractor in late August 2013. The CQ032 ESA CM informed the PMOC that the parties continue to negotiate the magnitude of the delays, which will help determine the cost and schedule impacts. The PMOC's estimate of the total schedule delay remains	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		approximately 13 months. <u>Recommendation</u> : Since the CQ032 contractor now has unlimited access to its entire work site, the PMOC has no recommendations for that part of the issue. The PMOC does recommend, however, that the parties resolve the cost and schedule impacts as quickly as possible.	
ESA-96- Sep12	1.5 Safety and Security	<u>Safety Certification Process</u> : The PMOC is concerned about the fact that personnel assigned to the Safety Certification Committee are continually changing; thus hampering the continuity and effectiveness of the Committee. The PMOC is also concerned that the Safety and Security Committee has not met on a regular basis as per the ESA SSMP. This lack of regular meeting will hamper the effectiveness of the Committee in coordinating activities related to the Safety Certification Process. <u>Status Update</u> : As of the end of September 2013, the PMOC has not seen a calendar produced for Safety Certification Committee meetings for 2013. <u>Recommendation</u> : The PMOC recommends that the Safety Certification Committee produce a calendar for regularly scheduled meetings and adhere to it. The PMOC also recommends that the MTACC Safety Director stress the need to maintain a stable committee to all of the participating stakeholders.	2
ESA-98 Sep 12	5.6 Cost Contingency Analysis	ELPEP Contingency Drawdowns: The schedule and cost contingency drawdown plans in the ELPEP document have been superseded by the new (2012) schedule and cost baseline. Status Update: MTACC provided to the FTA and the PMOC their proposed revisions to the ELPEP on March 19, 2013. This document was an abridged version of the original ELPEP agreement. Until ESA determines a revised schedule and budget for the project; meaningful update of the schedule and cost contingency drawdowns will not be possible. As of the end of September 2013, ESA does not have a revised baseline schedule or budget for the project. <u>Recommendation:</u> MTACC needs to update the ELPEP document and create new contingency drawdown plans. ESA will first have address the budget and schedule	1

September 2013 Monthly Report

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		impacts of the CM012R Bid cancellation before cost and schedule contingency drawdowns can be established.	
ESA-99- Dec12	5.2 Project Cost Management	The PMOC is concerned about the continuing lag of invoiced amount for construction and total project to date compared to the forecast amount in the rebaseline cash flow. This continues the trend of ESA historically not keeping up with its monthly expenditure plans. <u>Status Update</u> : As of the end of August 2013, ESA has only achieved 53.4% of Construction against the Planned 56.6%, and 57.5% of Total Project against the Planned 59.9%. The cash flow curves were planned based on the 2012 re-baseline. <u>Recommendation</u> : ESA should reforecast its monthly cash flow curve, linking to the	1
ESA- 100- Dec12	1.6 Quality	adjusted schedule forecast, and extend the likely date for the end of the payout curve. <u>As-Builts:</u> The contractor working on the CH053, CH054A, and CQ032 contracts continues to be late in submitting As-Built drawings. <u>Status Update:</u> The contractor has started to submit a limited number of As-Builts but they are not in the correct format. As a result, the GEC has to convert the files, a task that is not in their scope. Each ESA contractor is supposed to submit As-Builts each month in the proper format. This is not occurring. Additionally, the As-Builts that are submitted are not up to date. <u>Recommendation:</u> The PMOC is concerned that this issue is still not resolved and that the contractor is not complying with their contractual requirement. The PMOC recommends that ESA management press to immediately resolve this issue.	2
ESA- 101- Dec12	2.3 Construction (FHL02)	The PMOC remains concerned that the LIRR can produce the quantity of SSWPs that will be required for future construction on the fast pace that will dictate their need. <u>Status Update</u> : The LIRR developed Site Specific Work Plans (SSWPs) for all of the trackwork, including the installation of 5 turnouts, that it has done during 2013, although all were not completed until the day before each of the projects was to be started.	2

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		<u>Recommendation</u> : Since all LIRR trackwork for 2013 is finished and the 2014 trackwork program will be at least twice as large, the PMOC recommends that it begin development of the 2014 SSWPs immediately.	
ESA- 102- Dec12	2.2 Procurement	The PMOC is concerned about the need to utilize a significant amount of project contingency for procurement activities. Since the CM012R and CS179 packages were/are on the project critical path; and CH057 and CM014B are near critical; the PMT needs to determine the impact of the delays of these procurements on the overall project contingency. <u>Status Update</u> : The PMT presented a "planning" summary level schedule reflecting the delays induced by the CM012R Bid cancellation on April 9, 2013, however this schedule did not reflect a change in RSD, nor did it accurately reflect the actual contingency utilized as a result of the cancellation. ESA reported in the June 2013 Quarterly Progress Report that it was performing a "program level replan, with a target of issuing a revised baseline for review by mid-September 2013". This target date for mid-September was not met. <u>Recommendation</u> : The ESA PMT needs to realistically determine the impact to the overall project schedule of the delays to the procurements referenced above and produce	1
ESA-	2.1	a new baseline schedule as quickly as possible. The GEC and PMT continue to consistently miss all of their target dates for remaining	2
103- Dec12	Engineering Design	design activities on the project. In several instances (CM014B; CH057), this has resulted in delaying the procurement packages.	2
		Status Update: As of the end of September 2013, the PMT has not developed a design milestone tracking sheet.	
		<u>Recommendation</u> : The PMOC recommends that the PMT develop a design milestone tracking sheet for the remaining design work on the project, similar to what was done for the catenary design work, in order to more effectively manage the design effort.	

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
ESA- 105- Mar13	2.3 Construction: Queens	Contract CQ032: The PMOC is concerned that actual progress continues to lag planned progress at a rate that has increased from 2.7% to 15.9% in the last 6 months. <u>Status Update:</u> The lag in actual progress versus planned progress has increased to 29.1% since September 2012, although the rate of acceleration has slowed in 3Q2013. The ESA PMT and the contractor continue to negotiate a re-baselined schedule which will incorporate much of this lag, but the ESA CM informed the PMOC that this schedule may not be fully negotiated until the end of 4Q2013.	1
		<u>Recommendation</u> : The PMOC recommends that the MTACC expedite negotiations for the re-baselined schedule as quickly as possible so that the historic project delays may be incorporated.	
ESA- 106- Dec12	5.2 Project Cost Management and Control	<u>SCC Tracking and Control:</u> The SCC categories were used in Contract setup in a way that does not reflect the actual category of work if scope is transferred to other packages. The PMT provides identification of the SCC's affected strictly through scope transfers that then drive budget transfers; however budget is identified not by the type of work but by a pro-rata percentage of the existing package. <u>Status</u> : The PMOC continues to observe that the values of some of the SCC's vary month to month as of the end of September 2013. <u>Recommendation</u> : The cost allocation setup for SCC should be modified (best time would be when ESA completes evaluation of its' CBB). Budget Transfer approvals by the Change Control Committee should also note the SCC's affected.	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
ESA- 107- May13	5.1 Budget Cost	Contract Package Engineer's Estimates: ESA has more frequently been providing the PMOC with the backup for the package Estimates; however, what is provided often is not in formats useful for analysis. The Basis of Estimate, when provided, generally does not provide enough detail for thorough analysis, nor to identify to the PMT the assumptions of the Estimator. No opportunity for reconciliation or explanation as to why those costs are to be used was provided. In addition, ESA still has not provided any Estimate for the CM007 package. <u>Status Update</u> : As of September 31, 2013, ESA has not provided the estimate for CM007. <u>Recommendation</u> : The PMOC recommends that the MTACC's Project Control Manager submit estimates and proper documentation for review as well as a full analysis of the elements in the ESA estimate prior to each package bid date, allowing adequate time for review and comment. The PMT should also invite the PMOC to attend reconciliation meetings with the Estimating Firm(S) providing the Estimates. ESA should make sure the Estimating firms provide full and inclusive Basis of Estimate (BOE) documents as an integral part of the Estimate deliverable. The PMOC additionally recommends that the PMT have the estimates for the major packages, to be identified in collaboration with the PMOC, for independent cost review, as well as have the CCM perform a "check estimate" and conduct a constructability review prior to estimate. The PMOC recommends that all costs provided by ESA to MTA as the basis for the Contract Bid be incorporated into the PWE and EAC for the package/project and then be replaced upon actual opening of Bids.	1
ESA- 108- May 13	5.6 Project Cost Contingency	Estimate at Completion: ESA had introduced a budget line item named "allocated for mods" in its CBB to adjust active packages budget for specified anticipated change orders. Status:	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		<u>Recommendation</u> : The PMOC recommends that the PMT perform a more thorough analysis of the change order trends and budget for them, and also prepare an analysis and outline its plan for allocated and unallocated contingency consumption.	
ESA- 109-June 13	4.1 Schedule	 <u>Project Schedule</u>: The IPS update does not adequately represent the current state of the project and events that have transpired since the 2012 baseline schedule was instituted. <u>Status</u>: ESA stated in its June 2013 Quarterly Progress report that it will not be submitting an IPS update until it has determined a new schedule baseline. The target date of producing a new draft baseline by mid-September 2013 was not met. <u>Recommendation</u>: The PMOC highly recommends that ESA re-evaluate its 2012 baseline schedule and develop a new basis of schedule as soon as possible. 	1
ESA- 110-June 13	1.6 Quality	Quarterly Quality Oversights (QQOs): when performing their Quarterly Quality Oversights.Status: MTACC is updating their generic checklist and will include additional blank rows to be used based on the requirements in each contractor's Quality Plan.Recommendation: mendation: The PMOC recommended that each QQO checklist be tailored to include the requirements from the contractor's Quality Plan since that would be more meaningful than auditing to only the generic MTACC requirements. MTACC has agreed with this recommendation and the revised checklist will contain blank rows that will be completed based on the requirements in each contractor's Quality Plan. This issue is now closed.	2
ESA- 112-June 13	5.6 Project Contingency	Project Cost Reporting: The ESA PMT continues its monthly financial reporting without fully acknowledging the CM012R bid cancellation and subsequent repackaging estimates.	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		Status: As of the end of August 2013, ESA has incorporated the Award cost for CM005, and the Estimate for CM006 In addition this month ESA 'borrowed' \$69.2M from CQ033 to add it to the budget for CM006, without putting notes which show the total budget to now be short by that amount from the Project Working Estimate. Recommendation: The PMOC continues to recommend that ESA include the full impacts of the CM012R repackaging, and fully note all budget moves. Budget forecasting is a requirement in the CMP.	
ESA- 113- June13	2.2 Procurement	<u>Contract Packaging Plan</u> : ESA needs to produce a Contract Packaging Plan that reflects the current state of the project and should adhere to it. <u>Status</u> : ESA has not updated its Contract Packaging Plan since 2009. The ESA Risk Manager stated at the July 2013 Risk Review meeting that the Contract Packaging Plan remains under development and is not ready to be submitted for review. This status has not changed as of the end of September 2013. <u>Recommendation</u> : The PMOC continues to recommend that ESA produce an updated Contract Packaging Plan (CPP) and adhere to it.	1
ESA- 114- Sep13	3.0 ELPEP Compliance	ELPEP Compliance: With MTACC's submission of its East Side Access FTA Quarterly Report (Apr, May, June '13) and then continuing with the July and August 2013 monthly reports, the PMOC notes that the ESA project continues to not be in compliance with ELPEP and is not meeting some of the more important requirements of the SMP and CMP sub-plans to the PMP. <u>Status:</u> Specific areas of non-compliance were provided to MTACC at the September 12, 2013 ELPEP Quarterly Review Meeting. <u>Recommendation</u> : The PMOC recommends that this deficiency be corrected immediately.	1

8.0 GRANTEE ACTIONS FROM QUARTERLY AND MONTHLY MEETINGS

Priority in Criticality column 1 – Critical 2 – Near Critical

Number with Date Initiated	Section	Grantee Actions	Criticality	Projected Resolution Date
ESA-A45- Dec12	Section 2.2	MTACC committed at the December 12, 2012 CM012R post bid de-brief to provide FTA/PMOC with preliminary schedule impacts of CM012R bid cancellation within approximately two weeks from the meeting. The ESA PMT stated that they will present preliminary results to FTA/PMOC in the beginning of April 2013. Preliminary schedule impacts were presented on April 9, 2013; however MTACC has yet to address the Program Budget impacts as of the end of May 2013 and have stated at the last FTA/MTACC Executive Meeting in May 2013 that they will not have the budget impact numbers until later this year.	1	10/1/13
ESA-A46- Dec12	Section 4.2	The ESA PMT agreed at a meeting held with FTA/PMOC on July 30, 2012 to develop a set of critical metrics jointly with the FTA/PMOC and MTA IEC that would be used as an early indicator of issues that need to be addressed by senior management. The need to do this was re-iterated at the November 8, 2012 ESA/SAS mini-quarterly meeting. The IPS #47 has not been updated fully, and therefore the critical metrics have not been completely developed by the PMT.	2	9/15/13
ESA-A47- Mar13	Section 1.5	ESA Safety Director stated at the Operational Readiness meeting held in March 2013 that one of his goals in the upcoming quarter is to brief the CMs on active Construction Contracts on their role in the safety certification process. The PMOC stated that he would like a status report on this activity at the next Operational Readiness meeting in June 2013. The ESA Safety Director reported on the process, but did not have any tangible results to report in the September 2013 Operational Readiness Meeting.	2	12/30/13

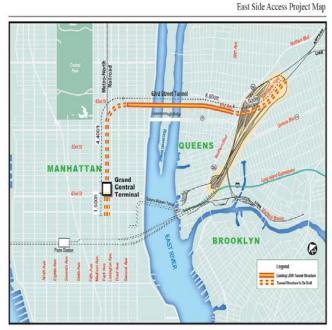
APPENDIX A -- LIST OF ACRONYMS

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
ССМ	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
0C0	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
SCC	Standard Cost Category
SMP	Schedule Management Plan

SSMP	Safety and Security Management Plan
SSOA	State Safety Oversight Agency
SSPP	System Safety Program Plan
TBD	To Be Determined
TBM	Tunnel Boring Machine
TCC	Technical Capacity and Capability
VE	Value Engineering
WBS	Work Breakdown Structure
WBY	Westbound Bypass Tunnel

APPENDIX B-- PROJECT OVERVIEW AND MAP



Project Overview and Map – East Side Access

MTA/LIRR East Side Access Project

Scope

Description: This project is a new commuter rail extension of the Long Island Rail Road (LIRR) service from Sunnyside, Queens to Grand Central Terminal (GCT), Manhattan, utilizing the existing 63rd Street tunnel under the East River and new tunnels in Manhattan and Sunnyside yard. Ridership forecast is 162,000 daily riders (27,300 new riders).

Guideway: This two-track project is 3.5 route miles long, it is below grade in tunnels and does not include any shared use track. In Harold interlocking, it shares ROW with Amtrak and the freight line.

Stations: This project will add a new 8 track major terminal to be constructed below the existing GCT. The boarding platforms and mezzanines of the new station will be located approximately 90 feet below the existing GCT lower level. A new passenger concourse will be built on the lower level of the terminal.

Support Facilities: New facilities will include: the LIRR lower level at GCT, new passenger entrances to the existing GCT, the East Yard at GCT, the Arch Street Shop and Yard, a daytime storage and running repair/maintenance shop facility in Queens, and ventilation facilities in Manhattan and Queens.

Vehicles: The scope and budget for the ESA project include the procurement of 160 new electric rail cars to support the initial service.

Ridership Forecast: MTA projects that, by 2020, the ESA project will handle approximately 162,000 daily riders to and from GCT. This Ridership projection is based on a 2005 study performed by DMJM/Harris (AECOM).

Schedule

9/98	Approval Entry to PE	12/10	Estimated Rev Ops at Entry to PE	
02/02	Approval Entry to FD	06/12	Estimated Rev Ops at Entry to FD	
12/06	FFGA Signed 12/13 Estimated Rev Ops at FFGA			
08/19	Revenue Service Date at date of this report (MTA schedule)			

Cost (\$)

4,300 million	Total Project Cost (\$YOE) at Approval Entry to PE
1,500 1111101	
4,350 million	Total Project Cost (\$YOE) at Approval Entry to FD
7,386 million	Total Project Cost (\$YOE) at FFGA signed
9,744.1 million	Total Project Cost (\$YOE) at Revenue Operations
9,744.1 million	Total Project Cost (\$YOE) at date of this report including \$ 1,036.1 million in Finance Charges
4,772.5 million	Amount of Expenditures as of August 31, 2013 based on the Total Project Budget of \$8,708 million
61.3	Percent Complete based on the current budget of \$8,708 million and expenditures in the August 31, 2013 report
53.4*	Construction Percent Complete
57.5*	Overall Project Percent Complete

#	Date	Phase	Category	Subject	Lessons Learned
1	Dec- 12	Construction	Construction	Muck Handling	During cavern excavation, the CM019 contractor became muck- bound, which caused a project delay of several months. The PMOC recommended that the contractor make extraordinary effort to evacuate the muck. After several months, it finally did, but the schedule time could not be recovered by that point. Lesson learned was to develop a well thought out muck handling plan (including establishment of proper haul roads) before work begins and to follow it during excavation.
2	Dec- 12	Construction	Management	Stakeholder Management	The CH053 contractor incurred many months of initial construction delay because Amtrak did not approve the Electric Traction design documents on the project's schedule. A major contributing factor to this was because the MTACC had not established a contractual working relationship with Amtrak prior to letting the CH053 contract. The PMOC recommended that the MTACC and its GEC more closely design the project in accordance with the comments that Amtrak was submitting. To date, the MTACC has exhibited some improvement in this matter, but there are still 2+ Stages to construct, and improvement has not been fast enough or consistent over time. Lesson learned was to develop good working relationships with all project stakeholders before any contracts are let.
3	June- 13	Construction	Planning/ Construction	Haul Roads	Haul roads to remove muck need to be passable (preferably paved with a mudslab) with locations pre- determined in areas of confined space such as caverns and tunnels. Deep,

APPENDIX C – LESSONS LEARNED

#	Date	Phase	Category	Subject	Lessons Learned
					muck-filled haul roads contributed to the contractor's slow progress in removal of muck during construction. Lesson learned was to plan haul roads in advance and ensure that the muck haulers can travel at a specific rate of speed in order to meet production goals.
4	June- 13	Construction	Training	Operator Skill with drill rigs	Lack of proper operator training contributed to inconsistent drilling of 10' deep blast holes which resulted in under/overbreak of excavated material, thus requiring rework to achieve desired results. Lesson learned was to ensure that drill rig operators are properly trained before being allowed to operate a production drill rig.
5	June- 13	Procurement	Contract Development	Contract Packaging	Access to work sites, interface with other contracts, and contract staging must be considered when projects employ multiple contractors that may conflict with each other, particularly in confined spaces such as tunnels and caverns. Lesson learned is to carefully consider the access that each contractor may require, perhaps developing a scale model of the expected operation, so that expected operation of each contractor is included in its contractual requirements.
6	June- 13	Administration	Quality	Submittals	Identification and resolution of quality issues (e.g. As-Built drawings, NCRs, etc.) must be managed on a daily basis to avoid creation of a backlog. Lesson learned is for the owner to have a well- trained staff with a consistent, coordinated approach (including appropriate pre-approved corrective action) when obtaining contractually required documents from contractors.

#	Date	Phase	Category	Subject	Lessons Learned
7	June- 13	Contract Specs/ Construction	Construction	Pneumatically Applied Concrete (PAC)/ Shotcrete	Mismanagement of PAC/Shotcrete application has many different aspects which could adversely affect a project. Lesson learned is that all projects which anticipate use of PAC/shotcrete should carefully examine all aspects of its use and that a careful engineering analysis of the expected use be made so that the approved use can included in the contract documents for the project.
8	June- 13	Procurement/ Construction	Procurement	Qualified Personnel	Ensure that project key personnel are properly qualified and experienced for the positions they will fill on the project. Lesson learned is that personnel not properly qualified, experienced, or possessing the requisite credentials can do more harm than good. The owner should ensure that it is getting the contractor's best personnel when excavating a tunnel or cavern.
9	June- 13	Scheduling	Construction	TBM Production	Project management should ensure that accurate, up-to-date, production rates for machinery are used when project schedules are developed. PMOC analysis has revealed that ESA schedules for the Manhattan Tunnel Boring Machines were based on a planned excavation rate of 53 linear feet/day. Actual TBM excavation averaged 34 LF/day, a difference of 35%. Lesson learned is that, depending on the length of excavation, inaccurate estimates can have a large negative impact on project schedule.

APPENDIX D – PMOC STATUS REPORT

(to be transmitted in a separate file)

APPENDIX E – SAFETY AND SECURITY CHECKLIST

2013 Third Quarter

Project Overview			
Project mode (Rail, Bus, BRT, Multimode)	Rail		
Project phase (Preliminary Engineering, Design, Construction, or Start-up)	Constructio	on	
Project Delivery Method (Design/Build, Design/Build/Operate/Maintain, CMGC, etc.)	Primarily 1	Design Bid/Bui	ld
Project Plans	Version	Review by FTA	Status
Safety and Security Management Plan	12/2010 Rev. 2	2012	PMOC sent its comments to FTA in July 2012 recommending conditional acceptance.
Safety and Security Certification Plan	11/2008 Rev. 1		Is within the SSPP of LIRR.
System Safety Program Plan	11/2008 Rev. 1		N/A
System Security Plan or Security and Emergency Preparedness Plan (SEPP)	11/2010		Is within the SSPP of LIRR.
Construction Safety and Security Plan	3/2007 Rev. 1		Project Construction Safety and Security Plan, contractors' site specific safety and security plans,
Safety and Security Authority		Y/N	Notes/Status
Is the grantee subject to 49 CFR Part 659 state safety oversight requirements?	Y		
Has the state designated an oversight agency as per Part 659.9?	Y		The New York State Public Transportation Safety Board (NYSPTSB) is the SSOA.
Has the oversight agency reviewed and approved the grantee's SSPP as per Part 659.17?	In Development		The Grantee is currently in communication with a representative of NYS SSOA.

Project Overview				
Has the oversight agency reviewed and approved the grantee's Security Plan or SEPP as per Part 659.21?	In Development	The New York State Public Transportation Safety Board (NYSPTSB) is the SSOA.		
Did the oversight agency participate in the last Quarterly Program Review Meeting?	Ν	Grantee to transmit SSMP to SSOA through the Grantee's System Safety Dept. The SSOA's representative has had a meeting with NYCT system safety and the grantee. The PMOC attended a meeting with the grantee and the SSOA. Additionally, in accordance with new MAP-21 provisions, the FTA recently audited the NYS SSOA. Preliminary FTA findings indicate a need for more funding in order for the SSOA to accomplish its mandate from FTA. Simultaneously, the SSOA was able to transfer an existing NYS employee into the SSOA. It is anticipated that the above events will lead to a greater ability for the SSOA to more effectively and efficiently accomplish its mission moving forward.		
Has the grantee submitted its safety certification plan to the oversight agency?	N	To the best of the PMOC's knowledge, the grantee has not directly submitted its safety certification plan to the NYS SSOA.		

Project Overview		
Has the grantee implemented security directives issues by the Department Homeland Security, Transportation Security Administration?	Ν	The MTA unified threat vulnerability methodology was applied to the ESA design. A vulnerability log was developed for ESA based on the feedback from the applied methodology. Controls within the design have been implemented to reduce the relative risk of those vulnerabilities identified. Analysis indicated that the controls within design were adequate for the vulnerabilities identified.
SSMP Monitoring	Y/N	Notes/Status
Is the SSMP project-specific, clearly demonstrating the scope of safety and security activities for this project?	Y	
Grantee reviews the SSMP and related project plans to determine if updates are necessary?	In review by MTACC Assistant Chief of Safety and Security.	The Grantee updated the SSMP as of 12/2010. A current update was to be undertaken in the second quarter of 2013. Recently, a flowchart was created representing the next phase (from design into construction) for incorporation into the SSMP. Stakeholders from within the grantee's organization are currently updating respective sections of the SSMP prior to distribution and approval of a draft.

Project Overview		
Does the grantee implement a process through which the Designated Function (DF) for Safety and DF for Security are integrated into the overall project management team? Please specify.	Y	The Assistant Chief of Safety and Security for the MTACC meets regularly with the project management team. The CCM and the Grantee's safety and security personnel are integrated into the management team. Integration is also achieved through implementation of ESA HASP, monthly project wide safety meetings, quarterly audits, OCIP inspections, weekly MTACC and contractor joint safety audits, and interface w/ MTA Police and NYPD Infrastructure Protection Unit of the NYPD's Counter- Terrorism Division. As a result of a third party security audit, the grantee has established contract specific security lead persons to assure continuity of security functions. Another result of the third party security audit was the memorialization of additional security requirements into the quarterly audit report.
Does the grantee maintain a regularly scheduled report on the status of safety and security activities?	Y	Safety and Security are reported on during the monthly safety meeting and are incorporated into Grantee's monthly project reports.

Project Overview		
Has the grantee established staffing requirements, procedures and authority for safety and security activities throughout all project phases?	Y	Contained within the Grantee's safety procedure documents.
Does the grantee update the safety and security responsibility matrix/organizational chart as necessary?	Y	To be incorporated into the next revision of the SSMP.
Has the grantee allocated sufficient resources to oversee or carry out safety and security activities?	Y	MTA, GEC, CCM, and contractors provide personnel and resources to carry out safety and security activities. Additionally, an MTACC consultant conducted a safety and security review of all MTACC projects. The consultant's report included programmatic and system security recommendations that are currently being reviewed by MTACC and MTA Police.
Has the grantee developed hazard and vulnerability analysis techniques, including specific types of analysis to be performed during different project phases?	Y	The SSMP Committee process is comprehensive and provides for this.
Does the grantee implement regularly scheduled meetings to track to resolution any identified hazards and/or vulnerabilities?	Y	SSMP committee meetings as well as project wide monthly safety meetings take place.
Does the grantee monitor the progress of safety and security activities throughout all project phases? Please describe briefly.	Y	Accomplished through daily audits by contractor and CCM and through the comprehensive SSMP Committee process.

Project Overview		
Does the grantee ensure the conduct of preliminary hazard and vulnerability analyses? Please specify analyses conducted.	Y	The SSMP Committee process provides for TVRA, safety, and security analysis as well as input from subject matter experts on the SSMP Committee.
Has the grantee ensured the development of safety design criteria?	Y	The SSMP Committee has established the safety design criteria.
Has the grantee ensured the development of security design criteria?	Y	Accomplished through the SSMP Committee process.
Has the grantee ensured conformance with safety and security requirements in design?	Y	Achieved through the SSMP Committee process.
Has the grantee verified conformance with safety and security requirements in equipment and materials procurement?	Ν	The grantee has not verified conformance for materials procured to date. Thus far, the grantee has relied on design specifications and manufacturers' quality controls for verification. The PMOC has advised that this course of action is insufficient and does not align with FTA established guidelines. The grantee is attempting to devise a workable solution.
Has the grantee verified construction specification conformance?	Y	Through ongoing contract review.
Has the grantee identified safety and security critical tests to be performed prior to passenger operations?	Ν	Although the Grantee has established preliminary hazard analysis (PHA) and a system test plan, the Grantee needs to identify safety and security critical tests in its Test

Project Overview		
		Program Plan. The grantee is working within the PMP to identify critical submittals relevant to system certification. PMOC has expressed concerns, both at meetings and in reports, about the non-linear pattern of completed construction vs. incomplete critical testing.
Has the grantee verified conformance with safety and security requirements during testing, inspection and start-up phases?	In Development	Project is not at these phases yet.
Does the grantee evaluated change orders, design waivers, or test variances for potential hazards and /or vulnerabilities?	In Development	Systems area design modifications not originally evaluated per the unified methodology are analyzed and controls are incorporated into the design.
Has the grantee ensured the performance of safety and security analyses for proposed workarounds?	In Development	
Has the grantee demonstrated through meetings or other methods, the integration of safety and security in the following: Activation Plan and Procedures Integrated Test Plan and Procedures Operations and Maintenance Plan Emergency Operations Plan	Y	An Emergency Preparedness Plan was promulgated by the Grantee in 11/2010. The EAP operational readiness group has been finalized to include MNR, LIRR, MTAPD, and FDNY. The first meeting took place in March of 2013. A Safety Certification update has been incorporated into this meeting, with the

Project Overview							
		MTACC Assistant Chief of Safety and Security providing regular status report. Task work group meetings have resulted in a white paper being formulated. The paper suggests that management hierarchy of GCT be presented as a single establishment (incorporating MNR and LIRR) in accordance with DHS and SIMS requirements.					
Has the grantee issued final safety and security certification?	Ν	Project is not at this stage.					
Has the grantee issued the final safety and security verification report?	Ν	Project is not at this stage.					

APPENDIX F – ON-SITE PICTURES

(Transmitted in separate file)

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]	Table G-2: Approv	ed Project	Change Orde	rs Status & EAO	C as of August	31, 2013 (Ac	tive Packages)	
Contract	Award Value \$(000)	Approved Change Order \$(000)	# of change orders	Invoiced amount \$(000)	Current Contract Value \$(000)	% of Change Orders to Date	% Complete to Date	Trend for 100% completion	EAC \$(000)	Total Post Bid contingency %
CM004	40,765	14,643	66	47,291	55,408	0.34	0.76	44.89%	55,866	54.17%
CM005	200,602	0	0	0	200,602	0.00	0.00	0.00%	225,653	12.49%
CM009	427,954	2,931	45	423,354	430,885	0.68%	98.25%	0.70%	430,944	0.70%
CM013	94,335	992	26	83,417	<mark>95,32</mark> 7	1.03%	83.54%	1.23%	98,476	3.73%
CM013A	56,044	340	1	10,377	56,384	0.61%	10.93%	5.55%	59,412	5.61%
CM019	734,000	53,027	60	777,040	787,027	6.18%	100.00%	6.20%	794,740	7.85%
CQ031	648,884	101,978	88	738,551	753,261	15.72%	98.05%	16.03%	777,523	19.82%
CQ039	84,950	14,276	20	95,966	99,226	16.81%	96.71%	17.38%	103,784	22.17%
Total	2,287,534	188,187	306	2,175,996	2,478,120	8.23%	87.81%	9.37%	2,546,398	11.32%
				System and Fin	ishes Contracts		•	•		1
CM014A	43,502	151	5	19,875	43,653	0.35%	45.53%	0.76%	53,395	22.74%
CM014MP	1,889	0	0	978	1,890	0.00%	51.75%	0.00%	2,424	28.32%
VM014	24,170	205	4	4,000	24,375	0.85%	16.41%	5.17%	53,113	119.75%
					ound Structure Cor					
CQ032	147,377	32,035	30	64,907	179,412	21.74%	36.18%	60.08%	231,792	57.28%
					oad Structure				,	
	107.000				,	<i>CD CD V</i>	00.000/			110.000/
CH053	137,280	85,950	124	184,842	223,230	62.61%	82.80%	75.61%	299,299	118.02%
CH054A	21,778	22,482	34	23,797	44,260	103.23%	53.77%	192.00%	73,405	237.06%
VQ065	2,748	0	0	788	2,748	0.00%	28.68%	0.00%	2,748	0.00%
Total	378,744	140,823	197	299,187	519,568	37.18%	57.58%	64.57%	716,176	89.09%
			· · · · · · · · · · · · · · · · · · ·	,	int Contracts			·		+
FHA01	9,500	1,500	1	16,655	16,824	15.79%	99.00%	15.95%	16,824	77.09%
FHA02	9,706	0	-	30,458	35,585	0.00%	85.59%	0.00%	41,684	329.47%
FHL02	7,351	0	-	25,451	24,600	0.00%	103.46%	0.00%	65,866	796.01%
FMM19	31,819	0	-	27,525	31,314	0.00%	87.90%	0.00%	31,423	-1.24%
VHA02	6,000	0	-	5,406	11,200	NA	48.27%	NA	11,200	0.00%
VHL02	6,000	0	-	15,900	19,200	NA	82.81%	NA	23,900	NA
VH051A	25,840	1,000	3	13,400	26,840	3.87%	49.93%	7.75%	32,600	26.16%
VH051B	5,354	1,867	6	6,700	7,221	34.87%	92.78%	37.58%	9,100	69.97%
Total	130,351	4,367	10	159,107	193,566	3.35%	82.20%	4.08%	254,569	95.30%
onstruction //O FA Total	2,666,278	329,010	503	2,475,183	2,997 <mark>,</mark> 688	12.34%	82.57%	14.94%	3,262,574	22.36%
Grand Total	2,796,629	333,377	513	2,634,290	3,191,254	11.92%	82.55%	14.44%	3,517,143	25.76%
GEC-D0600	140,000	223,730	42		363,730	159.81%				
PMC	-12,699	433,698	29	7	420,998	3415.21%				[
CMC-SP819	74,551	0	0		74,551	0.00%				

			FFGA 2	006				Re-baseline	2012	
SCC No.	SCC Description	YOE Cost (X\$000)	Federal 5309 New Starts Funds (X\$000)	Federal Other Funds (X\$000)	Local Funds (X\$000)	YOE Cost (XS000)	Federal 5309 New Starts Funds (X\$000)	Federal Other Funds (X\$000)	Local Funds (X\$000)	Difference in local funds (X\$000)
10	GUIDEWAY & TRACK ELEMENTS (route miles)	1,988,741	1,239,340	11,200	738,201	2,943,135	1,156,713	37,876	1,748,546	1,010,345
20	STATIONS, STOPS, TERMINALS, INTERMODAL (number)	1,168,655	650,000	0	518,655	1,514,027	363,555	0	1,150,473	631,818
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	356,264	150,000	39,237	167,027	388,054	109,574	28,761	249,719	82,692
40	SITEWORK & SPECIAL CONDITIONS	205,105	60,000	0	145,105	487,858	131,532	0	356,326	211,221
50	SYSTEMS	619,343	278,241	0	341,102	698,309	269,118	0	429,191	88,089
60	ROW, LAND, EXISTING IMPROVEMENTS	165,280	0	0	165,280	203,639	31,962	0	171,677	6,397
70	VEHICLES (number)	493,982	0	0	493,982	674,372	0	0	674,372	180,389
80	PROFESSIONAL SERVICES	1,184,000	254,533	0	929,467	1,648,606	489,306	0	1,159,299	229,832
	SUBTOTAL	6,349,900	2,632,114	50,437	3,667,349	8,708,000	2,551,760	66,637	6,089,603	2,422,254
100	100 FINANCE CHARGES	1,036,104	0		1,036,104	1,116,454	80,354	0	1,116,454	80,350
	Total Project Cost (10 - 100)	7,386,004	2,632,114	50,437	4,703,453	9,824,454	2,632,114	66,637	7,206,057	2,502,604
	Percentage of Total Project Cost	100%	35.6%	0.7%	63.7%	100%	26.8%	0.7%	72.5%	

Table G-3: Federal and Local Funding Distribution

Project Status:				Original at F	FGA	Сı	ırrent*	ELPEP **	
Cost	Cost Estimate			\$7.386B		\$9.	.824B	\$8.119B	
Schedule	Reve Date	nue Servio	e	December 2013	31,	Septe	mber 2019	April 30, 2018	
Total Project Per	cent	Based on	Expe	nditures			57.5 ***		
Complete		Based on	Earne	ed Value			NA		
Major Issue			Statu	18			Comments		
cancellation, scope repackaging and re-bidding. (M sol exi pac rep pro con NT CN on pro			Scope from cancelled CM012R (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. CM006 was advertised on August 15, 2013(initial projection was July 1, 2013) with proposals due on October 31, 31.			g tract 012R on the new had an 3. rtised 3) with	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.		
Packa MTA havin aware 2013 Other CS08 dates date i packa			rocurement of CS179 (Systems ackage 1) continues to slip. (TACC did not meet its goals of aving a recommendation to ward presented at the September 013 MTA Board Meeting. other System Packages (CS284, S084, and VS086) procurement ates remain TBD. Advertise ate for the CM007 and CM014B ackages remains TBD.			its official reporting. They have stated that CM007 cannot be awarded before July 2015 due to budget constraints.			
Project Schedule ESA Quar in th project			Quar in the proje	A stated in its June 2013 ES. arterly Progress report that it is the middle of re-planning the ject baseline and will not have in t			ESA did not release a draft revised baseline by mid- September as they committed to in the June 2013 Quarterly report and July 2013		

Table H -- Core Accountability Items - August 2013

	1	
	least mid-September 2013. It also	FTA/MTACC Executive
	stated that it would not be	Meeting.
	providing IPS updates until it has	
	a new schedule baseline.	
Amtrak Integrated Master	Develop an integrated master	This issue has been outstanding
Schedule	schedule that will lay out the	since MTACC committed to
	upcoming Amtrak projects	producing the Integrated Master
	(Moynihan, ERT Track Rehab.,	schedule in June 2012. An ESA
	Brookfield, etc.) and overlay the	staff member is coordinating
	ESA work at Harold. The ESA	this activity on a part-time basis
	Risk Manager stated in Q2 that he	until a dedicated scheduler is
	received a schedule through the	hired; however progress in
	end of 2013 for Moynihan	producing this schedule has
	project. As of the end of	been limited. Given that ESA is
	September 2013, the PMOC is	re-planning the remaining
	not aware of Amtrak providing	Harold work, development of
	schedules for additional projects	such a schedule will be further
	that may impact Harold.	delayed.
Next Quarterly Meeting:	TBD	
_	1	

* 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.