PMOC COMPREHENSIVE MONTHLY REPORT

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

Report Period March 1 to March 31, 2013

PMOC Contract No.DTFT60-09-D-00007
Task Order No. 2, Project No. DC-27-5115, Work Order No. 03

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

TABLE OF CONTENTS

TABLES AND GRAPHS

APPENDICES

THIRD PARTY DISCLAIMER

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REPORT FORMAT AND FOCUS

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

This report covers the project 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 system. 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 1st Quarter 2013

a. Engineering/Design Progress

As of the end of February 2013, MTACC reported that the Engineering/Design effort was 96.2% complete (on a cost invoiced basis). The percent complete varies monthly and depends on the award of tasks to the GEC.

b. New Contract Procurements

There was one new contract procured during 1Q2013, CM014MP, for a small scope of work removed from the CM014B Package and awarded under the MTA Small Business Mentoring Program.

c. Construction Progress

ESA reported in its February 2013 Monthly Progress Report that the total construction progress reached 49.3% complete on a cost invoiced basis, in accordance with its re-baselined budget of May 2012.

d. Continuing and Unresolved Issues

The PMOC remains concerned about the results of the CM012R bid and its impacts to the project budget and schedule. The ESA-PMT presented an analysis to the FTA/PMOC on March 5, 2013 showing how the new packaging plan would reduce the bid overrun on the CM012R procurement by approximately $200 million. It did this by taking the results of the lowest bid and modifying certain work scope estimates based on information obtained from bidders during post-bid debriefing sessions. The PMOC does not believe that the ESA PMT will be able to realize such amount of savings. particularly in light of ESA commissioned independent estimates on the CM005 portion which were 14% above the ESA new projection. In any event, the results of the cancelled CM012R solicitation will leave the ESA project with a significantly reduced budget contingency; which introduces a significant reduction in the project's ability to mitigate future cost risk events.

The PMOC is concerned that the IPS has not been fully updated since October 2012 making it impossible to ascertain the impacts of the CM012R bid cancellation as well as delays to other major procurements including: all of the Systems Packages (CS179; CS284 which is TBD; and VS086 which is also TBD); the remaining Manhattan Contracts (CM012R repackaging which is TBD; and CM014B, also TBD) and delays to the remaining Harold Structures Contracts (CH057, which has been split into several new packages; and CH058) on the overall project schedule.

Since CM012R was on the critical path, along with CS179, and project contingency is impacted beginning on January 1, 2013 for both of these contracts, it is the PMOC's opinion, that all of the 365 days of project contingency has been used up, thus effectively eliminating the project's ability to mitigate future schedule risk events. Until the IPS is fully updated; it is not possible to properly assess the viability of the current baseline schedule.

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e. New Cost and Schedule Issues

The major cost and schedule issues continue to be that ESA is not reflecting any impacts to the costs or schedule for CM012R in its monthly reporting, and has not updated its current PWE or IPS to reflect what happened. ESA has also not presented a comprehensive plan going forward detailing their efforts to mitigate adverse cost and schedule impacts.

3 PROJECT STATUS SUMMARY AND PMOC ASSESSMENT

a. Grantee Technical Capacity and Capability

Although there are no Technical Capacity and Capability issues related to the ESA Organization and staffing to report on at this time; other issues related to Technical Capacity and Capability are discussed later in the report.

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. The GEC and PMT continue to consistently miss all of its target dates for completing the remaining design activities on the project. In some instances (CM014B; CH057), this has resulted in delaying the procurement packages. Details are provided in Section 2.1 of this report.

d. Procurement

Several procurements are ongoing related to the CM012R and CS179 Contract packages and there are issues associated with these packages. Details are provided in Section 2.2 of this report. In addition, it should be noted that after the schedule re-baseline effort in 2011 resulting in a new baseline, 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).

e. Railroad Force Account (Support and Construction)

The LIRR currently has sufficient C&S personnel assigned to the ESA project to keep signal construction progress on schedule. Nonetheless, during a Force Account Progress/Coordination meeting #291 on March 19, 2013, a LIRR management representative informed the ESA Deputy Project Director, Force Account, that because ESA had not supplied requested information for 2014 track outages, they will not be able to set ESA priorities for 2014 track construction. The implication here is that the LIRR will now assign priority to track outages supporting its own Capital construction work.

During 1Q2013, Amtrak and LIRR Force Account Communication and Signal (C&S) personnel continued to make preparations for the cutovers of “F1”, “F2”, and Point Interlockings starting in May 2013, and Amtrak Electric Traction (ET) personnel continued to support the CH053 contractor with catenary structure installation, followed by catenary wire transfers where new catenary structures were installed. Amtrak Track Department personnel began construction of track panels to be used in the reconstruction of Lines 2 and 4 during the CQ031 installation of the concrete slab for the Westbound Bypass Tunnel in July 2013.

Additionally, during 1Q2013, the ESA PMT, Amtrak, and LIRR management continued to plan the Force Account work for the 2013 season. The current scope and schedule for the planned work is detailed in the Force Account portion of Section 2.3, Construction, of this report.

f. Third-Party Construction

Manhattan: The PMOC notes that the MTACC is taking every available step to assure that the CM009/CM019 contracts achieve Substantial Completion by their forecasted dates of June 1, 2013. As of March 31, 2013, the only remaining significant work items include miscellaneous shotcrete placement and completion of the sump channels in both the East- and Westbound Caverns.

The CM013 contractor is experiencing delays due to a stop work order on the use of the construction stair in the ventilation shaft by the MTACC Code Compliance Office. Through March 31, 2013 this stair was being replaced.

On the CM014-A contract the PMOC has previously reported on concerns with the delays caused by a needed redesign of the Systems Control and Data Acquisition (SCADA) system. This issue has been resolved; however, the substantial completion date has slipped to February 15, 2014 from the previous July 8, 2013.

Queens: The CQ031 contractor has completed all the work contained in the base scope of the contract, but the contract was amended during 1Q2013 to include installation of secant piles and excavation for the extension of Tunnel A and its approach structure east of the TBM extraction point. As a result, Substantial Completion was extended until January 30, 2014. The MTACC and the CQ031 contractor also continued to negotiate the construction of a concrete slab under Lines 2 and 4 in Harold Interlocking (advance work for the CH057 contract) as a further amendment to the contract. The only remaining work on the base contract is punchlist items and demobilization. Lastly, during the past quarter, the CQ031 contractor turned over access to the remaining sections of the Queens Open-Cut Excavation Area to follow-on contract CQ032, so that contract was able to access its work sites without impedance.

On the **CQO39 (Northern Boulevard Crossing) Contract,** sequential excavation method mining was completed in November 2012, almost 6 months later than originally planned. The contractor has now completed construction of the permanent tunnel liner structure. Two critical activities remain: completion of thawing of the frozen soil arch, already in progress, and load transfer of the elevated NYCT subway structure onto the tunnel structure which has already been delayed by NYCT from March 2013 to April 2013. The PMOC is concerned about the continued delays to completion of this Contract, the additional costs incurred, and the impact of delayed access to the follow-on CQ032 contract. The PMOC notes that ESA-PMT has reported this late turnover as a critical ESA program interface.

On the **CQO32 (Queens Structures and Plaza Substation) Contract,** The contractor continues to make progress but is now 15.9% behind the planned completion goal of 33.4%, and actual progress continues to lag planned progress at an increasing rate. Over the last 6 months, from September 2012 through February 2013, the difference between the actual and planned progress has increased from 2.7% to 15.9%. The PMOC is concerned about this trend and the contractor's ability to recover schedule delays. Future rate of progress will need to be higher than that originally planned to make up for schedule slippage but will be constrained by late

access to the remaining work area at the west end of the Queens Open-Cut Excavation (turnover from CQ039) and this delay is impacting the contract critical path.

Harold Interlocking: Contract CH053 (Harold Interlocking, Part 1 and G.O.2 Substation): The CH053 contractor continued to progress its construction during 1Q2013 with the installation of 14 catenary structures, 12kV ductbank and cables, retaining wall construction at the HON-N1, 39-N1, 39-N2, and 39-S5 locations, and construction of abutments and wingwalls for the Westbound Bypass (including the structure) and ML4 bridges. Additionally, the contractor resumed preparations to bore utility micro-tunnels at various locations throughout the project site and construction of the Tunnel A Approach structure.

Nonetheless, the contractor remains significantly behind schedule and the MTACC's projected Substantial Completion date of March 31, 2014, will most likely not be met (the contractor's CM has stated that its construction schedule shows a Substantial Completion (SC) date in 4Q2014 during monthly progress meetings). Based on cumulative progress of 75% through 1Q2013, the PMOC calculates that the project will take a total of 84 months, or until January 1, 2015, to complete. To address this discrepancy, the February 2013 ESA Monthly Report (latest one available to PMOC) indicates that ESA and the contractor are presently developing a re-baselined schedule for the project.

Contract CH054A (Harold Structures Part 2A: The CH054A has maintained its improved construction progress and continues construction in support of the "F2" cutover, an important Force Account activity which must occur by May 2013 to avoid negative impact on the Harold Interlocking critical path. The contractor also continues construction of the storm sewer between Thomson Avenue and Queens Blvd. The CH054A contract, however, is not on the project critical path.

g. Vehicles

The first phase of the vehicle procurement is underway. Details are provided in Section 2.5 of this report.

h. Commissioning and Start-Up

A Quarterly Operational Readiness meeting was held on March 28, 2013. Details are provided in Section 2.4 in this report.

i. Project Schedule

Table 1: Summary of Critical Dates

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

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

**Source – ELPEP baseline needs to be adjusted based on 2012 risk assessment results.

j. Project Budget/Cost

Table 2: Project Budget/Cost Table (as of February 28, 2013)

	FFGA			MTA's Current Baseline Budget (CBB)		Expenditures	
	(Millions)	(% of Grand Total Cost)	Obligated (Millions)	(Millions)	(% of Grand Total Cost)	(Millions)	(% of CBB)
Grand Total Cost	**$7,386**	**100**		**$9,824**	**100**	**$4,777.2**	**48.6**
Financing Cost	$1,036	14.0		$1,116		**512.3**	45.9
Total Project Cost	$6,350*	86.0	$4,107	$8,708*	88.3	**$4,294.6**	**48.9**
Federal Share	$2,683	36.3	$1,148	$2,699	30.6	$1,858.9	21.2
5309 New Starts share	$2,632	35.6	$1,098	$2,436.6	27.6	$1,601.3	18.3
Non New Starts grants	$51	0.7	$50	$67	0.8	$62.0	0.7
ARRA	0	0	0	$195.4	2.2	195.4	2.2
Local Share	$3,667	49.6	$2,959	$6,009	57.7	$2,435.7	27.7

* CBB represents current MTA Board approved $8,245 million budget [redacted]. The ELPEP Estimated Total Project Cost (ETPC) is $8.119 billion (exclusive of financing cost), reflecting the medium level of risk mitigation.

k. Project Risk

MTACC submitted Rev. 2 of the RMP, which addressed previous FTA/PMOC comments, in August 2012. The PMOC completed its review of the RMP and has recommended conditional approval based on MTACC correcting an error and expanding discussion of certain risk and mitigation topics. FTA formally notified MTACC of its acceptance of PMP Revision 8.1 by letter dated March 4, 2013.

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 Candidate Revisions for the ESA-PMP and discussed them with the FTA-RII Office. MTACC issued ESA PMP Revision 8.1 on September 27, 2012 and is planning to issue Revision 9.0 by June 30, 2013. The PMOC has completed its review of Revision 8.1 of the PMP and, in January 2013, recommended that the FTA-RII Office accept the document. FTA formally notified MTACC of its acceptance of PMP Revision 8.1 by letter dated March 4, 2013. MTACC has stated that it has implemented the PMP training process. PMOC discussions with the head of MTACC Chief of Quality, Safety and Security in January 2013 indicated that although some training has begun on sub-procedures, there has been no formal training on the PMP. The PMOC was subsequently advised that MTACC is conducting audits to establish where training efforts need to be focused. The PMOC will continue to monitor progress in this area.
- **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.
- **Conformance and Compliance:** The PMOC continues reporting to the FTA regarding the ESA project's continuing ELPEP compliance based on the PMOC's review of the 1Q2013 performance. See details below.
- **Risk Management Plan (RMP):** MTACC submitted Rev. 2 of the RMP, which addressed previous FTA/PMOC comments in August 2012. The PMOC completed its review of the RMP and has recommended conditional approval based on MTACC correcting an error and expanding discussion of certain risk and mitigation topics. FTA formally notified MTACC of its conditional acceptance of the RMP by letter dated March 4, 2013.
- **Continuing ELPEP Compliance**
  - Management Decisions
    - Outcome: Program and project level decisions made at appropriate level within MTACC management.
    - Status: Improvement noted in elevating certain issues to higher level for those having potential significant impact. Monthly MTACC/FTA/PMOC Executive Meeting provides venue for discussion of key issues.
    - Example: 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. IMPROVEMENT NEEDED.

- Design Development
  - Outcome: Stakeholder participation in design review process. Dedicated Amtrak liaison and consultant firm performed QA on Electric Traction (ET) design.
  - Status: 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.
  - Example: Amtrak approval of ET design still missing milestones. IMPROVEMENT NEEDED.
- Change Control Committee (CCC) Process and Results
  - Outcome: CCC approval for changes that may impact project schedule and cost must be approved by committee. Candidate Revision (CR) process also implemented in CCC.
  - Status: All scope shifts among construction contracts are being presented to the CCC for review and approval with the exception of creation of new package CM005.
  - Example: 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. Continuation of adequate performance is now of concern. ATTENTION NEEDED.
- Stakeholder Management
  - Outcome: Stakeholder participation in schedule re-baselining meetings and risk workshop. Coordination with stakeholders for outages and resources (force account meetings).
  - Status: 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.
  - Example: 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. IMPROVEMENT NEEDED.
- Issues Management
  - Outcome: Monthly executive meetings with FTA/MTACC to discuss issues.
  - Status: Also includes FTA Quarterly Review Meetings, last held on November 8, 2012; last executive meeting held on March 21, 2013. Resolution of issues discussed at these meetings continues to lag.
  - Although key project issues are being discussed in these forums; MTACC resolution of these issues continues to lag. For example, MTACC committed to producing a master integrated schedule overlaying the ESA Harold work on

Amtrak's planned Program of Projects in 2012, yet to date no progress has been observed. IMPROVEMENT NEEDED

- Procurement
  - Outcome: Decision to use Invitation for Bid (IFB) or Request for Proposal (RFP) made by MTACC based upon scope of work and type of procurement
  - Status: Decision process for procurement methodology has improved in 2012, however additional improvement is needed.
  - Example: 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). IMPROVEMENT NEEDED
- Timely Decision Making
  - Outcome: Project scope, schedule, budget continuously directed and controlled by administrative and management processes.
  - Status: Additional focus on decision timing with regard to issues outcome is needed to make this process effective.
  - Example: It has been approximately six months since the cancellation of the CM012R solicitation, yet MTACC has yet to finalize the scope of work in the three new proposed packages, and 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. IMPROVEMENT NEEDED
- Risk Informed Decision Making
  - Outcome: Project risk management team decides on mitigation measures/actions for risks identified in risk register.
  - Status: 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 two package level risk assessments in 2013. Timing of these package level risk assessments needs to be better coordinated with the procurement cycles.
  - Example: 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. IMPROVEMENT NEEDED.

The ELPEP Quarterly Review Meeting with MTACC, FTA-RII and the PMOC was held on March 13, 2013. The current ELPEP compliance checklist completed by MTACC was reviewed, and the FTA and PMOC will provide their input and review comments by mid-April 2013. The next ELPEP Quarterly Review Meeting is scheduled for June 12, 2013.

- **Revisions to the ELPEP Document.** On March 19, 2013, MTACC provided to the FTA and the PMOC their proposed revisions to the ELPEP. The FTA and MTACC have

agreed to hold working meetings to progress development of a revised ELPEP. These meetings are expected to start during 2Q2013.

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 organization.

b) Staffing

The ESA Design Manager left the project at the end of March 2013. Currently, the Deputy Program Executive for Design will assume that role with assistance from ESA Design Package Managers.

1.2 Project Management Plan

a) History of Performance

ESA presented its latest cost and schedule baseline to the MTA Capital Program Oversight Committee (CPOC) in May 2012. These baselines have been risk adjusted, resulting in a risk adjusted budget of $8.24B [redacted] and a projected RSD in August 2019. This is the second re-baselining effort undertaken by ESA since the FFGA.

b) PMP

On September 27, 2012, MTACC submitted PMP Revision 8.1. The PMOC has completed its review of Revision 8.1 of the PMP and in January 2013 recommended that the FTA-RII Office accept the document. FTA formally notified MTACC of its acceptance of PMP Revision 8.1 by letter dated March 4, 2013. At the quarterly ELPEP review meeting on March 13, 2013, MTACC reported that it continues to make good progress on the future PMP Revision 9.0 that is planned for completion in June 2013.

PMOC discussions with MTACC Chief of Quality, Safety, and Security in January 2013 indicated that although some training has begun on sub-procedures, there has been no formal training on the PMP. The PMOC followed up on this with the head of MTACC Chief of Quality, Safety, and Security and was told that training will begin at the end of May 2013.

1.3 Project Controls

a) Schedule

The ESA-PMT issued the IPS #45 with data date of March 01, 2013 with its associated variance report on March 25, 2013. This schedule has an RSD of September 1, 2019, and the amount of contingency is "to be determined". Additionally, ESA stated that the CM012R contract was split into three packages of CM005, 006, 007 and approximately $20 million in change order work for active Manhattan contracts. Contract CM005 is tunnel and shaft lining work south of the Manhattan caverns and it will be advertised in March 2013. Notice to Proceed for this contract is assumed to begin in August 2013, and is scheduled to have 24 month duration.

b) Cost

The Cost Management Plan (CMP) needs to be revised to reflect changes resulting from the May 2012 project re-baseline effort [redacted].

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 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 CM012R situation, 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. As of the end of March 2013, MTACC has not completed its analysis of the cost and schedule impacts resulting from the cancellation of the CM012R solicitation.

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

The MTACC Director of Safety presented a brief overview of the status of remaining design packages that have to be reviewed and approved by the Safety Certification Committee at the March 28, 2013 Operational Readiness Quarterly meeting. The PMOC expressed its concern at that meeting that there appears to be no certification related activities taking place for safety critical items that have already been constructed / installed on the project; and that this aspect of the certification process is significantly lagging. The Director acknowledged that there is very little awareness by the ESA project CMs of what needs to be done in terms of obtaining the proper safety certification for items already built or installed. He stated 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. [Ref: ESA-A47-March13]

The PMOC remains concerned about the fact 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 meeting will hamper the effectiveness of the Committee in coordinating activities related to the Safety Certification Process. The PMOC has expressed its concerns to the MTACC Safety Director. 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 having representation on the Committee. [Ref: ESA-96-Sep12] The Safety Director acknowledged the need to maintain stability of the Committee and noted that he will discuss this with LIRR Management.

b) Project Construction Safety Performance

Project safety statistics for lost time accidents continue to trend above the Bureau of Labor Statistics (BLS) national average at 2.36 vs. 2.20 lost time accidents per 200,000 hours.

Although there has been improvement in the overall project safety statistics (2.36 vs. 2.40 during last reporting period), several contracts continue to perform below the average for the project: for the CM009 contract, the lost time accidents continue to trend above the ESA Program average (2.66 vs. 2.36 lost time accidents per 200,000 hours). For the CM004 contract, the lost time accidents are trending above the ESA Program average (3.66 vs. 2.36 lost time accidents per 200,000 hours). On the CQ039 contract, the lost time accident statistics continue to trend well above the ESA Program average (5.02 vs. 2.36 lost time accidents per 200,000 hours).

ESA did not report any significant security issues during February 2013.

1.6 Project Quality

a) ESA Project Quality Manual (PQM)

The latest version of the ESA Project Quality Manual (PQM), Revision 6, issued in February 2009, was found to be acceptable. The ESA Quality Manager had committed to revise it by the end of February 2013 to incorporate changes to the ESA Quality System that have occurred since then. This commitment was not met. The ESA Quality Manager stated that other issues took priority and that the PQM will now be revised by the end of April 2013 (one month slip from last month). Although the latest version of the PQM has been accepted, the PMOC believes that it would be beneficial to update this document. [Ref: ESA-93-June 12]

b) Submission of As-Builts

The contractor working on the CH053, CH054A, and CQ032 contracts continues to be late in submitting As-Built drawings. The ESA Quality Manager conducted QA/QC surveillances of these Contracts on January 11, 2013 and all three contracts had additional findings besides being delinquent with submitting As-Builts. Since the Contractor has not responded to the surveillance reports, and has still not submitted As-Builts in the correct format, the ESA Quality Manager will be issuing Nonconformance Reports in April 2013. The PMOC is concerned that this issue is still not resolved and recommends that ESA press to bring this issue to closure. [Ref: ESA-100-Dec12]

c) Analysis of ESA CQ031 Tunnel Ring Segments

The CQ031 subcontractor who fabricated the pre-cast concrete tunnel lining panels had previously produced the same type of tunnel lining components for MTACC's No. 7 Line Extension project. At the beginning of the CQ031 contract, MTACC's Chief of Quality, Safety, and Security briefed the CQ031 team, advising them of what occurred on the 7 Line Extension project and what to be aware of on their contract. In the PMOC's opinion, this would have been a good Lessons Learned but was never documented.

The subcontractor delivered 13,314 segments [each tunnel ring has six segments] to the CQ031 project. 89 of the segments (0.67%) were damaged. The CQ031 contractor's Quality Manager and CQ031 ESA Quality Manager were satisfied with the quality of the rings produced by the subcontractor and with the minimal damage that occurred during shipping, handling, and installation. The PMOC accompanied the ESA CQ031 team to the subcontractor's plant on two occasions to review the manufacturing process and agrees with their assessment of the quality of the manufactured rings. The PMOC reviewed the tunnel ring segment damage analysis and found it to be comprehensive. The PMOC has no concerns or recommendations.

d) Concrete

The PMOC prepared a matrix of Nonconformance Reports (NCRs) written by ESA contractors. Examination of the matrix determined that each contract had nonconformances relating to the quality of the concrete. Analysis by the PMOC determined that these nonconformances were specifically related to the performance of the concrete suppliers and the preparation of concrete at the batch plant. The PMOC recommends that periodic monitoring of the concrete be performed at the batch plant and that the field verifies that the specified design mix matches the site delivery tickets. It is further recommended that this should be performed in concert with the Engineer of Record's review of the laboratory test cylinder break results. [Ref: ESA-104-March13]

1.7 Stakeholder Management

a) Railroads

In coordination with Amtrak and LIRR, more weekend outages took place in the Harold Interlocking with a focus on the installation of catenary and signal towers. If the current outage schedule can be maintained, the CH053 and CH054A contracts should be able to complete the catenary installation by the end of May 2013.

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 February 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. 2.0 dated July 2012, is a sub-plan within the ESA Project Management Plan (PMP). The RMP was updated to bring it into compliance with the ELPEP principles and requirements. MTACC has incorporated FTA/PMOC review comments into the RMP, Rev. 2. The PMOC completed its review of the RMP and has recommended conditional approval based on MTACC correcting an error and expanding discussion of certain risk and mitigation topics. FTA formally notified MTACC of its conditional acceptance of the RMP by letter dated March 4, 2013. The ESA-PMT has advised that the project is following the processes included in the RMP and the associated procedures although the PMOC has not observed the process directly. The PMOC will confirm that the project is using the RMP processes through review of the risk related project documentation. The PMOC notes that the risk informed management decision-making process detailed in the

ELPEP has become a standard routine that is included in all management activities throughout all the project phases.

b) Monitoring

The MTACC committed that ESA would hold monthly risk meetings with the PMOC to review current risk related activities at the end of 2Q2012. The first of these meetings was held on February 13, 2013, during which ESA gave a general overview of its risk management processes.

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

Status:

As of the end of February 2013, MTACC reported that the Engineering/Design effort was 96.2% complete (on a cost invoiced basis). The percent complete varies monthly and depends on the award of tasks to the GEC.

The GEC completed the 100% submittal for the Stage 3 catenary design in late 2012. The forecast date for submitting this to Amtrak was November 10, 2012 and the forecast date for getting approval from Amtrak was December 30, 2012; however, these dates were not met due to a request from Amtrak to include a preliminary design for the FHA03A package (which will provide electrification to additional tracks to facilitate Amtrak operations during Stages 3 and 4 work) along with the 100% design. The ESA PMT submitted a 60% design package for FHA03 in the first week in March 2013 and is anticipating comments from Amtrak in the first week of April 2013.

The ESA PMT expected to receive comments from Amtrak on the 100% submittal for the loop track (FQA65) catenary design in the first week of March 2013, however Amtrak stated that it would like to see the carwash footprint (in CH059) before it accepts the loop track design (note: this package has been with Amtrak since late 2012). The GEC is now in the process of establishing the carwash footprint and anticipates having it by the end of April 2013 so it can be submitted to Amtrak

The CM014B drawing set has been updated to include the Biltmore Room transformer reconfiguration has been completed and a confirmatory set of these drawings are with the printer and will be circulated among the major stakeholders (LIRR, MNR) once returned for confirmation that all of their comments have been adequately addressed.

The GEC has finalized the 90% drawings set for CM015 (48th Street Entrance) and they are now being circulated among the Railroads; property owners; and their consultants for review. The PMT is exploring the possibility of moving this scope back into the CM014B contract where it originally resided several years ago and will present this proposal to the CCC in April 2013.

The CH057 (Harold Structures Part 3a) is being split into three separate packages The installation of the track slab for the Westbound Bypass tunnel has been removed from the scope and is being negotiated as a change order with the CQ031 Contractor to take advantage of a 30-day continuous track outage scheduled to begin in July 2013. The Westbound Bypass work is

packaged separately and will be procured as CH057A. The package was sent to Procurement at the end of February 2013, with a plan to advertise in April 2013. The remaining work will be procured as a separate package and the design drawings for this package are currently being finalized.

The 90% submittal for CH058 (Harold Structures- Part 3b) had been previously forecast by the PMT for mid-November 2012; however, this date was not met due to the GEC focus on the CH061 design. The design of the eastbound re-route structure is being revised (re-route track around eastbound bypass and not build jack shield tunnel) to permit construction with minimum impact to railroad operations. This revision is underway and the 90% design submittal is now anticipated to be completed in May 2013 (previously forecast for April 2013).

The GEC completed the 100% design for the CH061 (Tunnel A) submission on February 13, 2013. The CCC approved transferring the scope of work in this package via a contract modification to the existing CQ031 Contract on December 19, 2012. The CQ031 Contractor was provided with the 90% design drawings and this change order is still being negotiated.

The GEC continued to provide support for the CM012R repackaging and re-bidding process. Change order work for CM019 has been completed. Scope from CM012R that was initially being considered as change order for CM013 and 13A will now be included as part of the CM006 Contract Package scope. Change order scope for CM004 has now been revised to include invert and lining of Access Tunnels 1 and 2.

Observation:

The GEC and PMT continue to consistently miss all of its target dates for remaining design activities on the project. In several instances (CM014B; CH057), this has resulted in delaying the procurement packages.

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 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. [Ref: ESA-103-Dec12]

2.2 Procurement

Status:

As of the end of February 2013, the total procurement activity on the project was reported to be 57.8% complete, with $5.032 billion in contracts awarded out of the $8.708 billion revised budget.

As discussed in previous monthly reports, 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, with the first one, CM005, to include work scope for the southern structures. This package was advertised for bid on March 21, 2013, with an anticipated bid opening in mid-May 2013. This package (without detailing the schedule and cost impacts) was presented to the ESA CCC on March 22, 2013 and ratified after the fact (note: the fact that this package was created and advertised before going to the CCC for ratification violates the process detailed in the MTACC Program Change Control Procedure).

The second new contract package CM006 (northern structures) is under development and is planned to be advertised around the same time frame that the bids for CM005 are forecast to be received (mid-May 2013).

The third new contract package CM007 (cavern) is also under development. ESA plans to advertise this package later in the year, with an anticipated award in 2014.

ESA is now also considering a fourth package (CM003) that will contain the East River Tunnel rehabilitation work and the bench wall scope that is currently in the CS179 (Systems Package 1) contract package.

The continuing slippage (since the December 1, 2012 forecast) of awarding CS179 (Systems Package 1) remains a major concern. The package is still being negotiated. The planned Notice to Proceed (NTP) remains TBD and it is important to note that this Contract is on the critical path, with a direct impact on project schedule contingency by not awarding it by the end of 2012. The PMT is now planning to split the Tunnel Systems Package (CS284) into two packages: one for track work, and one for the traction power work. Procurement dates for this package are now TBD. This will have an impact on the Systems Package 1 Contractor. NTP for the Signal Equipment package (VS086), which is being negotiated as an RFP, is also TBD.

Procurement dates for the CM014B package remain TBD, pending determination of dates for CM012R work scope. The critical path of the ESA project schedule and remaining schedule contingency cannot be determined until actual dates for these packages have been determined. A small scope of work in the Manhattan Concourse was split from the CM014B and procured under the MTA Mentoring Program as CM014MP. Four were received on February 28, 2013 and NTP was issued to the low bidder on March 27, 2013.

The previous forecasted advertise date for CH057 package (February 1, 2013) is no longer valid, since the PMT is splitting this package into three separate packages as discussed in the design section of this report. The current schedule calls for advertising the CH057A (westbound bypass work) package in July 2013, with NTP forecast for December 2013. Construction of the slab will be done as a change order to the CQ031 contract. Remaining work in CH057 is currently forecast in the IPS to be advertised in July 2013.

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).

Concerns and Recommendations:

The PMOC is concerned about the need to utilize a significant amount of project contingency for procurement activities as well as the impacts of delaying such significant amount of construction work. 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. [Ref. ESA-102-Dec12] The PMT also remains concerned about the instability of the contract packaging and continuing scope shifts. ESA continues to shift scope among existing and future packages; resulting in a schedule and cost instability making it difficult to determine the exact status of the overall project.

2.3 Construction

ESA reported in its February 2013 Monthly Progress Report that the total construction progress reached 49.3% complete on a cost invoiced basis, in accordance with its re-baselined budget of May 2012. The data date for financial and progress figures, for all reported contracts, is February 28, 2013. Details for active construction contracts are provided below. It should be noted that none of the Manhattan or Queens contracts currently under construction are on the current project critical path.

Manhattan Contracts

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

Status: The EAC increased $13.49M from $42.31M to $62.84M. The Substantial Completion (SC) date slipped 9 months from January 10, 2013 to October 1 2013 for the Vent Building and slipped 8 months from August 8, 2012 to April 15, 2013 for the 245 Park Ave. Entrance. Data date for the table below is February 28, 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	$40.77M (Award)	$42.31M	+1.54M 3.78%	$62.84M	+$22.07M 54.13%	+13.49M 48.52%
Scheduled SC Date	09/16/11	01/10/13 08/03/12 (245 Park)		10/01/13 04/15/13 (245 Park)		
Duration (NTP - SC)	24 mos.	40 mos. 35 mos. (245 Park)	+16 mos. 66% +11 mos 45.83% (245 Park)	48.5 mos. 43 mos. (245 Park)	+24.5 mos. 102.08% 79.16% (245 Park)	+8.5 mos. 21.25% 8 mos 22.85% (245 Park)

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
100%	88.1%	18.89%	1.57%	2.44%	.40%	100%	1.71%/mo

From February 2013 ESA Monthly Report

Construction Progress:

- 44th St. Vent Plant
  - For the Vent Shaft continued erection of the concrete walls in the shaft extension. This work is forecast for completion April 18, 2013.
  - Vent Building above grade steel erection is scheduled to begin on April 15, 2013.
  - 44th St. north and south utility connections remain on hold awaiting completion by MTACC of videotaping of the existing sewer from Madison Ave. to the project site and subsequent permit approval from NYDEP.
- 245 Park Ave. Entrance
  - MNR continues to finalize their in-house work, and the "official" opening of the entrance is up to MNR.

Observations/Analysis:

- The PMOC has previously reported on the issues with the 245 Park Entrance portion of this contract. To summarize, these issues are:
  - Substantial Completion – The PMOC has previously been advised that the contractor is substantially complete with this work. However, the PMOC has been further advised that the MTACC is attempting to issue a Beneficial Use Certificate but MNR is withholding their cooperation until the contractor completes additional work request(s) and the GEC complies with their request for a revised stair rail drawing,
  - In the meantime, the new escalator remains turned off, with no direction as to who is responsible for maintaining its operation during this impasse period, potentially damaging the escalator. Technically, with no substantial completion or beneficial use certificate the contractor is responsible for maintaining the escalator but they are refusing to "eat" the ongoing costs due to constant delays by MNR.

Concerns and Recommendations:

With the issues at the 245 Park Entrance, the PMOC observes that this situation shows no sign of immediate resolution. The PMOC recommends that the Project Office proceed immediately to obtain authorization for a retro contract modification allowing them to direct the contractor to proceed with procurement of an elevator/escalator operator to maintain the continuous operation of the new escalator in order to protect this new capital program asset that has federal funding.

CM009/CM019 Contracts – Manhattan Tunnels Excavation/Structures Part 1

Status:

CM009	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	$428.00M (Award)	$402.6M	-$25.4M -5.9%	$402.7M	-$25.3M -5.9%	+$0.1M +0.0%
Scheduled SC Date	07/08/10	6/1/13		6/1/13		
Duration (NTP - SC)	48 mos.	83 mos.	+35mos. 73.0%	83 mos.	+35 mos. +73.0%	0 0.0%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
96.1%	96.6%	5.7%	0.5%	4.2%	0.7%	2.1%/mo.	1.7%/mo.

From the February 2013 ESA Monthly Report

CM019	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	$734.00M (Award)	$772.2M	+$38.2M +5.2%	$791.6M	+$57.6M +7.8%	+$19.4M +2.5%
Scheduled SC Date	03/31/12	6/1/13		5/31/13		
Duration (NTP - SC)	48 mos.	62 mos.	+14 mos. 29.2%	62 mos.	+14 mos. +29.2%	0 0.0%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
94.9%	97.2%	22.3%	1.9%	6.3%	0.5%	2.1%	1.4%

From February 2013 ESA Monthly Report

Construction Progress: During 1Q2013, the CM009/019 contractor continued progress on its final project tasks before it can declare Substantial Completion. These included completion of excavation in GCT 5 West Wye, the 55th St. vent cavern, and the cross flue, continuation of initial shotcrete of the East- and Westbound Cavern walls, excavation and finish of the sump channels in both caverns, initial invert placement in GCT 3 East and West Wyes, as well as several punchlist construction items.

Summary Observations: During the PMOC's last site Manhattan site visit on March 29, 2013, it appeared that the contractor is on schedule to declare Substantial Completion by June 1, 2013. The PMOC does not foresee any obstacle that would prevent that from happening.

Summary Concerns and Recommendations: The PMOC no longer has concerns about these contracts. It does recommend, however, that the contractor continue to progress its work as it has recently until all construction scope and punchlist items are complete.

CM013 – 50th Street Vent Facility

Status: The EAC increased $2.53M from $123.32M to $125.85M. The Substantial Completion (SC) date slipped 10 months from December 11, 2012 to October 9, 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%	$125.85M	+$7.5M 6.33%	+2.53M +2.05%
Scheduled SC Date	06/10/12	12/11/12		10/09/13		
Duration (NTP - SC)	29 mos.	35 mos.	+6 mos. +21.9%	45 mos.	+16 mos. +55.17%	+10 mos. +28.57%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
84.6%	76.8%	47.97%	3.99%	13.94%	2.32%	100%	3.3%

From February 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:

- The MPT along 50th St. and 49th St. is ongoing and being maintained successfully.

  The crane within the MPT along 50th St. has been removed and placed on the initial concrete slab for the Public Plaza.
- At the Service Tunnel, backfilling over the 1st Basement roof is continuing along with the realignment and new utility line work as it progresses..
- At the Vent Plant the contractor continued with installation of metal decking placement of floor slab concrete, column and beam concrete encasement. Concrete Masonry Unit (CMU) wall erection is ongoing. New permanent steel stairs have been erected from the Loading Dock to the2nd floor roof, and from the 1st floor down to the 2nd Basement.
- At the Ventilation Shaft the work remains on hold by order of the MTACC Code Compliance Office due to issues with the construction stair.

Observations/Analysis:

The PMOC observes that there is a stop-work order on use of the construction stair in the Ventilation Shaft by the MTACC Code Compliance Office. The FDNY determined that the stair had insufficient width to accommodate fully equipped firemen/women in the stair. To rectify this issue the contractor is in the process of dismantling and removing the stair and replacing it with a new, approved stair. No reason was given as to how the MTACC Code Compliance office approved this, apparently, non-compliant stair.

Concerns and Recommendations:

The PMOC is concerned that this stop work order is adding delays to the project and is affecting the ability of the contractor to complete the permanent concrete stair in the shaft.

CM013A – 55th Street Vent Facility

Status:

Through March 31, 2013:

- The Original Award and Current Approved Contract Value remained $56,044,000
- The Original Baseline and forecast Substantial Completion remained April 5, 2015.
- The Estimate at Completion (EAC) increased from the previous $58,846,000 to $59,155,000.
- The cumulative actual percent complete is 5.1% vs the planned 3.4%

Construction Progress:

- Work proceeds with day or night shifts as needed.
- The MPT is along 55th St. between Park Ave.& Madison Ave. The MPT includes one traffic lane and is switched north or south along 55th St. as needed.
- Surveying and layout is ongoing.
- Continued with developing the Support of Excavation (SOE) with installation of rebar and placing concrete for Piers 6N, 7N & 9N through 15N.
- Began installation of deck beams with the installation of beams DB21 to DB14 during a weekend full street closure, March 30 – 31, 2013.
- Began installation of temporary power conduits.
- Completed videotaping of sewer line.

Observations:

The work is proceeding smoothly. The contractor continues to coordinate with ConEd and NYDEP over temporary utility supports design, new utility design & installation, abatements and unmapped utility lines.

Concerns and Recommendations:

None at this time.

CM014A – GCT Concourse & Facilities Fit-Out

Status: The EAC $8.34M from $43.65 to $51.99M. The Substantial Completion (SC) date slipped 7 months from July 8, 2013 to February 15, 2014. Data date for the table below is February 28, 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	$43.50M (Award)	$43.65M	+$0.15M +.0.3%	$51.99M	+$8.49M +19.51%	+8.34M +19.10%
Scheduled SC Date	04/25/13	07/08/13		02/15/14		
Duration (NTP - SC)	18 mos.	21 mos.	+3 mos. +16.66%	27mos.	+10 mos. +50%	+6 mos. +28.57%

% Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
59.4%	34.1%	641.3%	53.58%	31.15%	5.19%	16.47%/mo	6.0%/mo.

From February 2013 ESA Monthly Report

Construction Progress:

- Completing installation of Electric Structures in Zones 2, 4 & 5 and air tunnel waterproofing in Zones 1 & 2.
- Continued placement of subgrade material in Zones 3, 4, & 5, work on Subway Roof Opening in Zones 3 & 4 and slab on grade placement in Zones 3, 4 & 5.
- Completed concrete placement at air tunnel & ductbanks in Zones 2, 3 & 4.

The contractor needs to confirm that the ABB transformers were shipped with impact detectors. The Project Office reported that some generators have been delivered and there will be 4, 400A units available for temporary power. The contractor was directed to install a meter.

Observations/Analysis: The contractor's update continues to show substantial completion forecast to February 24, 2014 due to the previous issue with the SCADA design. Although the design issue has been recently resolved, and unaffected equipment like transformers and generators have resumed delivery, the PMOC observes that this schedule slippage will likely continue until the shop drawings resubmittals for SCADA and affected equipment are complete and established dates can be obtained from the manufacturers on all equipment fabrication and delivery timetables. The Project Office has confirmed that they will transfer the responsibility to maintain all of the temporary systems in Madison Yard to this contractor, including ventilation, fire alarm system, sprinkler system, temporary phones, toilets and temporary lighting. The takeover date from the CM019 contractor continues be June 1, 2013. The contractor's request to make the CMU wall mockup a part of the permanent construction is typical industry practice and is a reasonable request. The setup of a new temporary power source will be essential to both this and upcoming contracts.

Queens Third-Party Contracts

CQ031 Contract – Queens Bored Tunnels and Structures

	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	$648.90M (Award)	$756.0M	+$107.1M +16.5%	$785.0M	+$136.1M +21.0%	+$29.0M +3.8%
Scheduled SC Date	09/26/12	09/26/12		1/30/14*		
Duration (NTP - SC)	36 mos.	36 mos.	(no change)	52 mos.	+16 mos.* +44.4%	+16 mos.* +44.4%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
100.0%	90.3%	19.3%	1.6%	2.4%	0.4%	2.8%	1.0%*

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

Construction Progress: The CQ031 contractor continued to advance construction toward Substantial Completion (SC) during 1Q2013, only to have the SC date changed due to a negotiated amendment to its base contract. This amendment added the installation of secant piles and excavation of Tunnel A and its approach structure to the contract. The work was originally in the CQ031 contract to be done by the TBM. The contractor also continued to de-commission the TBM electrical substation, install block and brick at the Yard Lead Emergency Exit and B-13 Substation buildings, and continued to demobilize and repair punchlist items throughout its other contract sites. ESA and the contractor also began negotiations to install a 600 LF x 50 LF (approximate) concrete slab under Lines 2 and 4 in Harold Interlocking as advance work for the CH057 contract. This slab will be constructed to act as a shield under which the CH057 contractor will jack a 22' wide construction box for the Westbound Bypass tunnel under the main lines. The slab work is scheduled to begin in mid-July 2013, with the jacked box construction most likely to begin in 2014. As of this report, negotiations have not been finalized, although the ESA Construction Manager has stated that it is ESA's intent to award the contract to CQ031 early in 2Q2013.

Observations/Analysis: Based on its most recent observation during its site visit on March 15, 2013, the PMOC believes that the contractor would have completed its construction on time to declare Substantial Completion by its last MTACC forecast date of February 15, 2013. The PMOC also believes that the MTACC made a very prudent decision to extend the CQ031 contract to include the Tunnel A extension work and potentially the main line concrete slab work.

Concerns and Recommendations: The CQ031 contractor has proven to be very capable of performing its construction. As a result, the PMOC has no concerns or recommendations at this time.

CQ032 Contract – Plaza Substation and Queens Structures

Status: The EAC increased $4.83M from $187.70M to $192.53M. The SC date slipped 1.5 weeks from 05/26/15 to 06/05/15. Data Date for tables below is 02/28/13.

	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)	$166.06M	+$18.68M +12.7%	$192.53M	+$45.15M +30.6%	+26.47M +15.9%
Scheduled SC Date	08/14/14	08/14/14		06/05/15		
Duration (NTP - SC)	36 mos.	36 mos.	(no change)	46 mos.	+10 mos. +27.8%	+10 mos. +27.8%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
33.4%	17.5%	14.1%	1.18%	6.3%	1.05%	4.58%/mo.	2.95%/mo.

Construction Progress: January-March 2013

- Rehabilitation, alteration and new construction work continued at five ventilation facilities: Roosevelt Island, Vernon Blvd, 12th St., 23 St., and 29th St.
- B10 Substation: Completed structural steel erection and metal deck installation; continued concrete column encasement.
- Open-Cut Excavation Area: Continued mobilization in east (Q-Tip) and west (Milestone 1A) sections; continued construction of invert slab.

Observations/Analysis: The contractor continues to make progress but is now 15.9% behind the planned completion goal as compared with 12.0% behind the previous month. Actual progress continues to lag planned progress at an increasing rate. Over the last 6 months from September 2012 through February 2013, the difference between the actual and planned progress has increased from 2.7% to 15.9%. The PMOC is concerned about this trend and the contractor's ability to recover schedule delays. Future progress needs to be higher than that originally planned to make up for schedule slippage but will be constrained by late access to the remaining work area at the west end of the Queens Open-Cut Excavation (turnover from CQ039) and this delay is impacting the contract critical path. The cumulative forecast delay due to this late turnover from CQ039 and the two previous late turnovers now totals 10 months.

Concerns and Recommendations: PMOC's remains concerned about the potential cost and schedule impacts resulting from the access delays detailed above. The PMOC recommends that the MTACC PMT, working with the CQ032 and CQ039 contractors and the respective ESA construction managers, continue their efforts to expedite turnover the remaining CQ039 work area. [Ref: ESA-95-Sep12] The PMOC is additionally 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. The PMOC recommends that MTACC prioritize development of a recovery plan. [Ref: ESA-105-Mar13]

CQ039 Contract – Northern Boulevard Crossing

Status: EAC increased $400K from $102.10M to $102.50M. Forecast Substantial Completion (SC) date remained unchanged at 04/29/13. Data Date for tables below is 02/28/13.

	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	$84.95M (Award)	$98.94M	+$13.99M +16.6%	$102.50M	+$17.55M +19.3%	+3.56M +3.6%
Scheduled SC Date	10/05/11	08/01/12		04/29/13		
Duration (NTP - SC)	20 mos.	30 mos.	+10 mos. +49.5%	39 mos.	+19 mos. +95.2%	+9 mos. +30.6%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
100.0%	94.3%	43.1%	3.59%	27.7%	4.62%	(N.A. - past date)	2.85%/mo.

Construction Progress: January-March 2013

- Completed: Installation of waterproofing, structural steel and reinforced concrete for the permanent tunnel lining system; partial turnover of the Milestone 1A staging area to the follow-on CQ032 contractor.
- Continued: Construction of center slab and track invert in Early Access Chamber area.
- Commenced: Thawing of the frozen soil arch supporting the subway tunnel and Northern Boulevard.

Observations/Analysis: Problems with establishing and maintaining acceptable ground freeze of the soil arch and much slower than planned progress of the SEM mining resulted in significant delays from November 2011 through July 2012. Since that time, the PMOC notes that progress has improved considerably. Partial turnover of the work areas to the follow-on CQ032 contractor has been completed. The PMOC believes that the remaining work may not be completed by the forecast SC date of April 29, 2013 because of the unpredictable effects of thawing the frozen soil arch and challenges coordinating the elevated subway line load transfer with NYCT. The PMOC notes that the first NYCT subway track outage planned for the weekend of March 16, 2013 was cancelled by NYCT and re-scheduled for April 2013.

Concerns and Recommendations: The PMOC has previously noted that late completion of this contract had delayed turnover of the Milestone 1A Area, scheduled for July 30, 2012, and the start of Contract CQ032 work in the Early Access Chamber area (CQ032 Access Restraint #1, August 24, 2012). Despite improved progress, the PMOC remains concerned about continued delays, additional costs and the impact of delayed access to the follow-on CQ032 contract. The PMOC notes that ESA has reported this late turnover as a critical ESA program interface. The PMOC recommends that ESA-PMT continue to work closely with the CM, the contractor and the GEC to expedite work completion.

Harold Interlocking Contracts

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

	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	$137.30M (Award)	$206.8M	+$69.5 +50.6%	$282.9M	+$145.6M +106.0%	+$76.1M +36.8%
Scheduled SC Date	05/05/10	01/16/12		3/31/14		
Duration (NTP - SC)	28 mos.	48 mos.	+20 mos. +71.4%	75 mos.	+47 mos. +167.9%	+27 mos. +56.3%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
100%	75.0%	10.5%	0.9%	6.4%	0.5%	3.6%/mo.	2.1%/mo.

Construction Progress: The CH053 contractor continued construction progress at many different work sites during the past quarter. Although none of the work tasks were completed, the contractor:

- Continued installation of catenary structures, 12kV ductbank and cables
- Continued construction of retaining walls, abutments and wingwalls
- Resumed preparations to bore micro-tunnels in various locations
- Resumed construction of the Tunnel A Approach structure

Observations/Analysis: The contractor continues to advance its work, although it faces daily challenges to obtain sufficient Force Account personnel (from both railroads) and adequate track usage to support its construction. Improvements to these challenges have been sporadic and cyclical. The ESA February 2013 Monthly Report forecasts the SC date for CH053 to be March 31, 2014. It also indicates, however, that ESA and contractor management are presently re-baselining the project schedule. The PMOC, based on the present percent complete of 75% (ref: February 2013 ESA Monthly Report), forecasts that CH053 Substantial Completion will be January 1, 2015, a total contract duration of 7 years.

Concerns and Recommendations: The PMOC is concerned that new challenges such as priority conflicts with other concurrent contracts or lack of designs will add to the existing challenges to delay the CH053 contract even more. Since the project Critical Path goes through the Harold construction, it is imperative that this situation be managed on a daily basis in order to avoid additional delays. The PMOC therefore recommends that the MTACC devote sufficient qualified staff to manage these daily challenges. At present, the ESA position for F/A Manager – LIRR Interface has been vacant for over a month. Filling that position would be a good start toward resolution of this concern.

CH054A Contract – Harold Structures Part 2A

Status:

	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	$21.80M (Award)	$25.90M	+$4.10M +18.8%	$60.1M	+$38,3M +175.7%	+34.2M +132.0%
Scheduled SC Date	12/21/10	12/21/10		3/14/14		
Duration (NTP - SC)	16 mos.	16 mos.	(no change)	53 mos.	+37 mos. +231.3%	+37 mos. +231.3%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
100.0%	71.5%	18.4%	1.5%	3.9%	0.7%	6.3%/mo.	2.4%/mo.

* Based on a forecast progress curve not yet reflected in an approved revised baseline schedule.

Construction Progress: During this past quarter, the CH054A contractor has continued to progress ductbank, conduit, and manhole installation crucial to the Force Account cutover of "F2" Interlocking and continued installation of the storm sewer between Thomson Avenue and Queens Blvd.

Observations/Analysis: The most important element of the 2013 CH054A construction, the preparation for the "F2" cutover, is on schedule and should be completed by the end of April 2013. Otherwise, the contract is not on the critical path of the Harold work although it does complete the 12kV system that is so important to the overall construction of the project.

Concerns and Recommendations: The PMOC is concerned that the CH054A contract has the same challenges as the CH053 contract. It has the added disadvantage that it is a much smaller contract than CH053 and, as such, it does not command the upper level management attention that CH053 has. The PMOC recommends that, as with CH053, the MTACC dedicate sufficient qualified personnel to manage the project, starting with hiring a replacement for the vacant LIRR Force Account Manager's position.

Systems Contracts

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

Status:

	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	$30.89M (Award)	$30.72M	-0.17M -0.6%	$30.67M	-0.14M -0.7%	-0.05M -0.16%
Scheduled SC Date	06/25/12	06/25/12		07/31/15		
Duration (NTP - SC)	37 mos.	37 mos.	+ 0mos. (+0%)	74 mos.	37 mos. 100.5%	37 mos. 100.5%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
47%	49%	-	-	-	-	(N/A)	

Construction Progress:

CILs: POINT, H4 and H3 CILs have been delivered; POINT and H4 installed. H3 installation is scheduled for the latter part of May 2013, predicated on grading of the site and addressing an existing overhead wire problem that is impacting Bay Crane's ability to set the house.

H5 CIL is being readied for factory test at supplier's Batesburg, SC facility and will be ready for the LIRR's witness testing scheduled for June 2013.

H6 CIL, Location 30 and H2 CIL submittals have been received and are under review by the GEC and LIRR. H6 and Location 30 are scheduled for delivery in the latter part of this year, while H2 and H1 are scheduled for delivery in the early 2014.

Observations/Analysis:

Late review comments continue to affect the CIL delivery schedule. This is due in part to the loss of engineering resources at the LIRR.

Concerns and Recommendations:

LIRR and GEC's timely review of remaining contract submittals is critical to keeping remaining work on schedule. The PMOC will continue to monitor the schedule progress on this Contract.

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

Status:

	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	$7.10M (Award)	$8.10M	+$1.00M +14.1%	$8.7M	+$1.6M +22.5%	-$0.3M 0.0%
Scheduled SC Date	08/24/10	08/24/10		09/30/13		
Duration (NTP - SC)	18 mos.	18 mos.	+0 mos. 0%	55 mos.	+37 mos. +205%	+37 mos. +205.0%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
92%	88%					(N/A)	

Construction Progress:

Harold Tower Supervisory Control System (HTSCS)/"F" Harold Alternate Control System (FHACS): Both systems have been installed in their respective locations with the FHACS being tested in shadow mode (mimicking the hardwired control panel to verify the panel's display) at the PSCC. Upon completion of testing at PSCC, GATE Interlocking will be placed in service on the FHACS in late April, 2013. F2 Interlocking testing has begun and testing of the F2 indications is currently on-going. F2 is scheduled to be cutover on May 17, 2013.

Observations/Analysis:

The control systems have been installed in the Amtrak Alternate Control Room at PSCC (FHACS) and the LIRR Harold Temporary Trailer and remain in test mode. During testing in late 2012, issues with the operation of the system surfaced which are still being addressed by the Contractor. These include incorrect indications being displayed, status light malfunctions, failover reconnection, and several other minor issues. Nothing by itself is considered a showstopper, but they all need to be addressed before the railroads will approve for the in-service. Substantial completion, which was forecast for February 2013, is now reforecast for September 2013.

Concerns and Recommendations:

The PMOC will continue to monitor the schedule progress on this Contract for the remaining portion of the work. PMOC recommends that all of the remaining testing be concluded as soon as possible to avoid impacting the F2 cutover in May 2103.

Railroad Force Account Construction Packages

Status:

FHA01	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	$9.50M	$16.80M	+$7.30M +76.8%	$16.70M	+$7.2M +75.8%	+0.1 M 0.5%
Scheduled SC Date	09/30/10	01/03/12		4/21/14		
Duration (NTP - SC)	39 mos.	54 mos.	+15 mos. +38.5%	81 mos.	42 mos. 107.7%	+27 mos. 50.0%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
86.3%	86.6%	14.8%	1.2%	4.5%	0.8%	2.6%/mo.	1.1%/mo.

**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.

ESA PMT, LIRR, and Amtrak management continue to plan the 2013 ESA Construction Program. The 2013 projects and their forecasted schedules are:

- LIRR Surfacing and Installation of CWR on Westward Passenger Track – May/June 2013
- Amtrak Cutover of "F2" Interlocking – May 17 - 19, 2013
- CQ031 Installation of concrete slab under Lines 2 and 4 – mid-July through mid-August 2013
- LIRR Installation of Turnouts "AS1" and "ZI1" – concurrent with concrete slab track outage (3 additional turnout installations to follow after the slab outage)
- Amtrak Reconstruction of Lines 2 and 4 – concurrent with concrete slab track outage
- Amtrak Cutover of "F1" Interlocking – late September/early October 2013
- LIRR Cutover of "Point" Interlocking – contingent on completion of "F1" cutover, 4Q2013

Additionally, LIRR has several signal locations in Harold Interlocking scheduled to cutover based on availability of track outages and completion of predecessor activities

Construction Progress: The only significant remaining work in Stage 1 is Amtrak Electric Traction (ET) construction. During this past quarter, ET Force Account personnel continued to support the CH053 contractor to install 14 catenary structures and transferred catenary wires in those locations where new structures had been erected previously. Additionally, ET forces

continued to relocate signal power and feeder cables and bond catenary structures at various locations. The ESA forecast for Substantial Completion of Stage 1 is March 31, 2014.

Observations/Analysis: The Amtrak Project Manager ET works very well with ESA management and has been able to focus limited personnel on the most critical items of the moment to make a tremendous improvement in the ET construction of the project. Nonetheless, it is a daily challenge for both parties to keep construction moving forward due to the limited personnel.

Concerns and Recommendations: The PMOC maintains its concern about limited ET personnel, although there is little that can be done about the situation given the Amtrak labor agreement (the PMOC realizes that it will take years for Amtrak to qualify a sufficient number of ET personnel to supply all the manpower necessary for the ESA project). The best that can be done to address this is what is being done – continual daily management involvement. The PMOC therefore recommends that ESA do everything possible to maintain the daily status quo.

Harold Early Stage 2 Amtrak FA (FHA02)

FHA02	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	$9.70M	$30.4M	+$20.7M +213.4%	$40.50M	+$30.80M +317.5%	+$10.1M +33.2%
Scheduled SC Date	9/30/13	08/30/14		8/20/14		
Duration (NTP - SC)	58 mos.	69 mos.	+11 mos. +19.0%	71 mos.	+13 mos. +22.4%	+2 mos. +2.9%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
68.8%	51.8%	4.9%	0.4%	4.9%	0.8%	1.7%/mo.	2.5%/mo.

*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.

Construction Progress: Amtrak Stage 2 construction includes the Communication and Signals (C&S) installation, testing, cutover, and placement into service of "F2" and "F1" Interlockings. The "F2" cutover is scheduled for the weekend of May 17-19, 2013. During the past quarter, Amtrak C&S forces continued to prepare for the cutover and are presently on schedule to meet that date. Concurrently, C&S personnel are also preparing for the "F1" cutover, which is scheduled for late September/early October 2013.

Summary Observation: The PMOC is aware that Amtrak senior management has made the "F2" cutover a priority for 2013 and that ESA, Amtrak, and LIRR senior management meet every 2 weeks to ensure that ESA project priorities are properly addressed. The PMOC believes that the parties are taking all the necessary steps to ensure that the "F2" cutover will occur on schedule.

Summary Concerns and Recommendations: With the involvement of Amtrak senior management and the coordination efforts of the parties, the PMOC's only concern is that, although it appears that the Force Account aspect of the cutover will be ready, the contract portion (supply of software) remains questionable (Amtrak has a " work-around" plan if the software is not available). The PMOC therefore recommends that the ESA PMT continue its daily oversight of the development of the contract software.

Harold Stage 1 LIRR FA (FHL01)

Status:

FHL01	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	$28.80M	$20.80M	-$8.00M -27.8%	$21.9M	-$6.9M -24.0%	+$1.1M +5.3%
Scheduled SC Date	09/30/10	10/10/11		11/12/14		
Duration (NTP - SC)	40 mos.	52 mos.	+12 mos. +30.0%	82 mos.	+42 mos. +105.0%	+30 mos. +57.7%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
78.8%	75.2%	3.2%	0.3%	1.3%	0.2%	2.5%/mo.	1.8%/mo.

*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.

Construction Progress: LIRR construction of ESA Stage 1 includes installation of turnouts, signal equipment installation in preparation for Stage 2, relocation of signal power cables, installation of third rail on new turnouts, and construction and realignment of two new main line tracks. During 1Q2013, LIRR Traction Power personnel continued to install signal power cable on its new alignment while C&S personnel continued preparations for the Stage 2 installation and cutover of 3 signal locations in Harold Interlocking.

Harold Early Stage 2 LIRR FA (FHL02)

Status:

FHL02	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	$24.4M	+$17.0M +229.7%	$64.5M	+$57.1M +771.6%	+$40.1M +164.3%
Scheduled SC Date	11/30/15	11/30/15		10/26/15		
Duration (NTP - SC)	75 mos.	75 mos.	+0 mos. 0.0%	74 mos.	-1 mo. -1.3%	-1 mo. -1.3%

Percent Complete		**Actual - 12 mos.**		**Actual - 6 mos.**		**Avg. Req'd. Progress**	
Plan	**Actual**	**Total**	**Avg./mo**	**Total**	**Avg./mo**	**Contract SC**	**Forecast SC**
24.7%	23.6%	4.0%	0.3%	3.6%	0.6%	1.3%	2.5%

*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.

Construction Progress: Stage 2 LIRR Force Account construction includes the installation of 15 turnouts and construction of approximately 2,800 LF of track, continued installation, testing, and cutover of 9 signal locations in Harold Interlocking, continued third rail installation on the new turnouts, installation of a motor generator set to separate LIRR signal power from Amtrak signal power, and renovation of Harold Tower. Of this, the present Stage 2 Memorandum of Understanding (MOU) only authorizes the early signal work. During the first quarter of 2013, LIRR Force Account C&S personnel continued installation of conduits, trough, and signal cable in preparation for the cutover of the signal locations.

Summary Observation: The LIRR currently has sufficient C&S personnel assigned to the ESA project to keep signal construction progress on schedule. Nonetheless, during Force Account Progress/Coordination meeting #291 on March 19, 2013, a LIRR management representative informed the ESA Deputy Project Director Force Account that, because ESA had not supplied requested information for 2014 track outages, ESA had lost its ability to set its own priorities for 2014 track construction. In other words, the LIRR would schedule its own capital construction work and have track usage priority ahead of ESA construction work.

Summary Concerns and Recommendations: The PMOC is concerned that the lack of urgency that the LIRR has placed on ESA construction (by virtue of the above announcement) will have a negative effect on the overall Harold program schedule. The PMOC recommends that both parties reassess their respective positions regarding this decision to agree on a common priority. [Ref: ESA-101-Dec12]

2.4 Operational Readiness

A Quarterly Operational Readiness meeting was held on March 28, 2013. The several topics were discussed at the meeting including: status of operational readiness documents; asset management plan; and a report on safety certification activities during Q1 2013.

Current Status-ESA Operational Readiness Documents

Volume 2 (tasks and activities) of the Rail Activation Plan is being updated to reflect the current operational readiness activities. The draft of Volume 3 of the Rail Activation Plan (Monitoring) is complete and is under review by MNR and LIRR. Rail Activation Task Groups are focusing Early Start Activities (those activities that need to occur before the end of 2014).

Asset Management Plan

The Operational Readiness Group has been working with the LIRR IT Department to complete the asset inventory templates. The standard template has been reduced from 40 pages to approximately 9 pages. After the templates have been reviewed and finalized, they will be ready to be issued to contractors. Work also continues on the Interim Maintenance Plan (for use on assets that have been installed before beneficial use is declared). Sections on Obsolescence and Trend Analysis have been added to the Plan.

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:

There are no significant concerns or recommendations at this time.

2.5 Vehicles

Status:

The M-9 RFP process consists of two phases: Phase 1 is a pre-qualification step that was advertised on June 5, 2012. Phase II consists of the Technical and Pricing proposals from qualified proposers were initially due in January 2013. An extension to March 7, 2013 was granted due to the car builders request for more time, and a further extension to April 4, 2013 was given. Award date is still anticipated for November 13, 2013.

Observation:

The proposal due date has slipped almost three months in the first quarter of 2013.

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:

415 Madison Ave: MTACC is working with the building department expediter to obtain confirmation from New York City Department of Buildings (NYCDOB) that the shared vestibule concept is in code compliance. Once NYCDOB signs off on shared vestibule concept, MTA RE will schedule a meeting with the owners to discuss next steps. MTACC's in house attorney and outside counsel are working on the easement agreement between 415 Madison Ave and MTA as well as an agreement between 280 Park and 415 Madison for a shared vestibule, progress contingent on NYCDOB sign off.

280 Park: MTACC is working with a building department expediter to obtain confirmation from NYCDOB that shared vestibule concept is code compliant. MTA RE and MTACC were successful in obtaining more legible documents so the MTACC surveyor can prepare metes and bounds survey. MTACC's in house attorney and outside counsel are working on an easement agreement between 280 Park and MTA, as well as an agreement between 415 Madison Ave and 280 Park for a shared vestibule.

335 Madison Ave: MTACC has told MTA RE that only the Biltmore ADA elevator will be included in project. The public hearing date will be determined after meeting with all of the property owners.

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)

Observation:

Finalization of the real estate aspects of the 48th Street Entrance to GCT is taking considerably longer than originally planned.

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 the period of January 2013 through March 2013, the ESA project team continued to provide community outreach and coordination. The PMOC notes that MTACC has initiated a joint Construction Management/Community Outreach contract update meeting program to provide better coordination between the two groups to enhance the MTACC's effectiveness in responding to the various affected communities' concerns. Meetings for Manhattan construction contracts were held on January 31, 2013 and February 28, 2013. A similar meeting for Queens construction contracts was held on February 4, 2013.

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 PMOC completed its review of MTACC's incorporation of the candidate revisions. Based on the FTA's review of the PMOC's comments, the PMOC updated and re-submitted them in May 2012. The revised comments were sent to MTACC in June 2012 and working meetings with MTACC to resolve the comments and develop an implementation approach were held on July 17, 2012 and August 1, 2012. MTACC submitted, on August 7, 2012, their plan to incorporate comments into PMP Revision 8.1 in 2012 and PMP Revision 9.0 in 2013. On September 27, 2012, MTACC submitted PMP Revision 8.1. The PMOC has completed its review of Revision 8.1 of the PMP and in January 2013 recommended that the FTA-RII Office accept the document. FTA formally notified MTACC of its acceptance of PMP Revision 8.1 by letter dated March 4, 2013. At the quarterly ELPEP review meeting on March 13, 2013, MTACC reported that it continues to make good progress on the future PMP Revision 9.0 that is planned for completion in June 2013.

Observation:

MTACC is utilizing a task force approach to address the FTA/PMOC comments on incorporation of the PMP candidate revisions it plans to include in the next update, Revision 9.0. MTACC continues to actively make progress in advancing comment incorporation into the PMP document.

Concerns and Recommendations:

There are no specific PMOC concerns or recommendations at this time.

3.2 PMP Sub-Plans

Status:

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

3.3 Project Procedures

Status:

In November 2012, the MTACC indicated to the PMOC that it had completed development of all procedures that it intended to revise. The total count of revised ESA procedures stands at 77.

Observations:

In the PMOC's opinion, the MTACC has developed all the revised procedures necessary to support its revised Project Management Plan (PMP).

Concerns and Recommendations:

Although the MTACC has finished development of all its revised procedures, the PMOC is aware that it has not yet begun full-scale training of its personnel, which is also part of the process. The PMOC recommends that the MTACC begin the training phase of this commitment as soon as possible.

4.0 PROJECT SCHEDULE STATUS

Status:

The ESA-PMT issued the IPS #45 with data date of March 01, 2013 with its associated variance report on March 25, 2013. This schedule has an RSD of September 1, 2019, and the amount of contingency is "to be determined". Additionally, ESA stated that the CM012R contract was split into three packages of CM005, 006, 007 and approximately $20 million in change order work for active Manhattan contracts. Contract CM005 is tunnel and shaft lining work south of the caverns and was advertised on March 21, 2013. Notice to Proceed for this contract is assumed to begin in August 2013, and is scheduled to have 24 month duration.

The second contract will be the concrete tunnel lining work north of the caverns (CM006) and followed by the caverns finishes and station construction (CM007). Contract CM006 is planned to be advertised mid-2013 and awarded by the end of the year. The PMT has stated that the IPS impact analysis cannot be completed because CM007 scheduling details have not yet been finalized. CM007 will affect the critical path of the project since it contains interface milestones with the systems contracts.

Finally the PMT stated that there are no major changes in Harold Schedule this month.

Observations/Analysis:

ESA has announced that the total duration of contracts CM005, 006, and 007 will be 54 months. The PMOC had reported in its last comprehensive report that, considering the lowest bidder price for Contract CM012R, the duration should be 55 months. The PMT acknowledges the PMOC's finding, although the PMT has not released the schedule for CM006 and CM007. In addition, the impact of this duration increase on contract CS179 is not known yet. The PMOC has presented the current state of the project critical path in section 4.2. In Appendix G, the PMOC has presented the procurement and construction timeline of future packages and their slippages from the Baseline IPS of July 2012.

ESA has experienced significant schedule slippage for its active packages as well. Only 20% of total schedule slippage can be associated with scope transfer among packages. Appendix G also shows the amount of schedule slippage for all active packages. The PMOC has analyzed the trend of schedule slippages for active packages, applied the impact of this trend on future construction packages, and presented this data to the FTA RII office.

Concerns and Recommendations:

The PMT has acknowledged that the total duration of contracts CM005, 006 and 007 would be approximately 54 months; however, the PMT has not developed a detailed schedule and construction sequence to demonstrate the interface milestones among these three packages and contract CS179 which are all on the project critical path. Furthermore, the PMT is in advanced negotiation with contractors for contract CS179 in which no milestone dates have been

developed and validated by risk assessment. Although the Schedule Management Plan (SMP) Section 5.4 calls for the establishment of interface milestones dates, the PMT has not been compliant.

As a result of its analysis, the PMOC believes that the current IPS does not accurately reflect the actual state of overall project schedule at present. The PMOC therefore recommends that the PMT update its IPS based on a realistic duration for the CM005, 006 and 007 contracts and interface milestones with contract CS179, including the impact of delays due to not awarding the CS179 contract by the end of 2012. The IPS has not been fully updated since October 2012.

4.1 90-Day Look-Ahead of Important Activities

Status:

The PMT has issued a revised procurement and construction schedule, although it is not complete since it does not address contracts CM006, 007, and CS179, and CS284 status.

Observations/Analysis:

PMOC will receive actual schedule status for the 1Q2013 in April 2013, however table 4.1 below shows the PMOC's analysis of the 3Q2012 and 4Q2012 schedule status of ESA's performance.

In Table 4.1 below, the PMT did not reach its plan for finish and start milestones for the Harold Contracts. If this trend continues, the embedded contingency for the Harold work (approximately 11 months) will be reduced significantly.

Table 4.1: Activities and Finish Milestones Status

	Planned Activities/Milestones Finish											Actual											
	F	H	IST	L	M	NO	Q	R	S	TBD	Grand Total	F	H	IST	L	M	NO	Q	R	S	TBD	Grand Total	%
2012																							
Qtr3	1	493	0	4	65	5	151	0	3	0	722	0	175	0	0	30	0	84	0	3	0	292	37.82%
Qtr4	0	293	0	0	48	1	90	1	9	7	449		89	0	0	20	1	55	0	0	0	165	36.75%
2013																							
Qtr1	0	164	0	0	31	0	69	0	30	14	308												
Qtr2	0	124	0	0	40	2	54	0	45	4	269												
Qtr3	0	184	0	0	58	5	17	0	71	0	335												
Qtr4	0	74	0	1	85	4	9	0	212	0	385												

Table 4.2: Start Milestones Status

	Planned										Grand Total	Actual											
	H	IST	L	M	NO	Q	R	S	TBD	X		H	IST	L	M	NO	Q	R	S	TBD	X	Total	Percentage
2012																							
Qtr3	13			2		6		1			**22**	4	0	0	1	0	3	0	1	0	0	9	40.91%
Qtr4	8			1			1	4	1		**15**	0	0	0	0	0	0	0	0	0	0	0	0.00%
2013																							
Qtr1	5			1				3			**9**												
Qtr2	7			4	2	1		9			**23**												
Qtr3	8			11	2	2		4			**27**												
Qtr4	3			6	2			8			**19**												

Legend: F: Startup/testing and commissioning; H: Harold Contracts; IST: Integrated System Testing; L: Operation readiness; M: Manhattan Contracts; NO: Contracts not driving Revenue Service Date; Q: Queens Contracts; R: Rolling Stock; S: System Contracts

Concerns and Recommendations:

It is evident that ESA's level of adherence to schedule in 3Q2012 and 4Q2012 was extremely low at about 40%. In view of what has happened to Contract CM012R, and the delay in award of Contract CS179, the PMOC does not believe that, when information is available, performance metrics will have improved greatly during 1Q2013. 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 reiterated at the November 8, 2012, ESA/SAS mini-quarterly meeting. The PMOC recommends that PMT progress this effort to develop critical performance metrics along with an agreed upon venue for discussing these regular basis. [Ref: ESA-A46-Dec12] At present, the critical performance metrics that are impacting the project significantly are the missed NTP dates for the two major contracts that are on the project critical path, CM012R and CS179. Both of these contracts had to be awarded by the end of 2012 to avoid impacting the project schedule.

4.2 Critical Path Activities

Status:

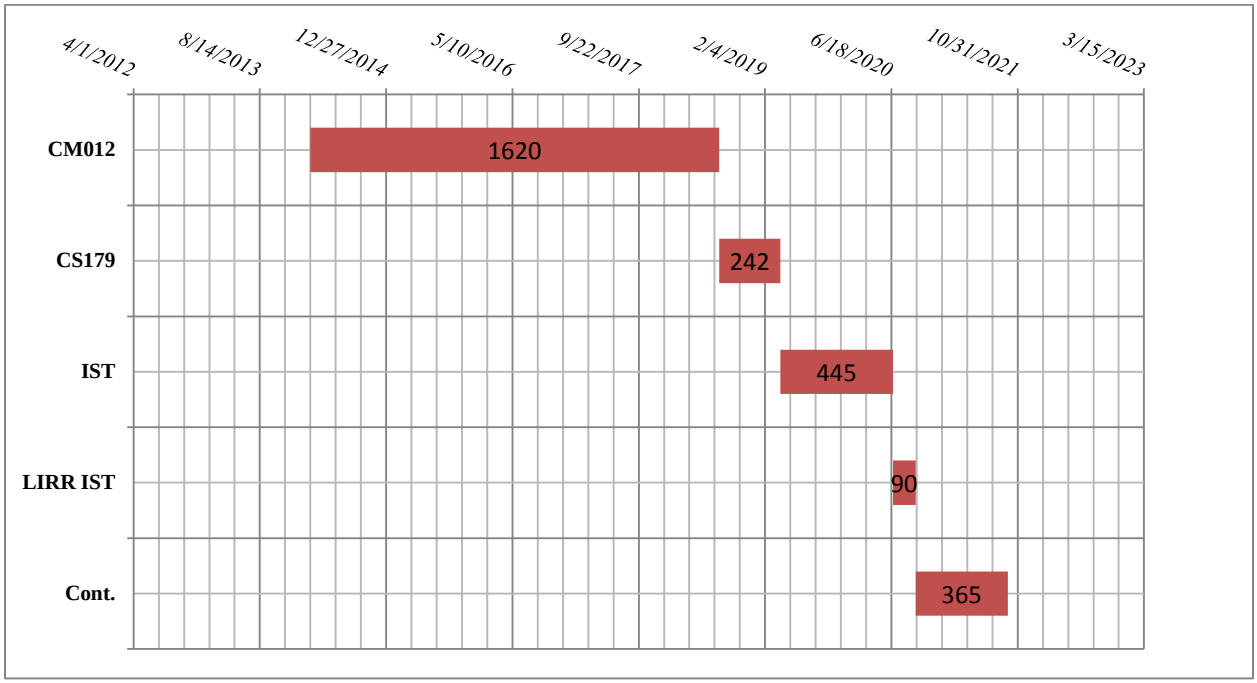
The PMT has not fully identified the schedule impacts of not awarding CM012R and the delay in award of CS179. In addition, the PMT has divided the CM012R package into 3 different packages and the duration of only one of the subsequent contracts (CM005) is known (24 month). The PMT, however, has indicated that the other two packages (CM006 and CM007) would take about 30 months to be completed (assuming overlap of portions of the work. This means the original contract, CM012R, has a duration of 54 months plus six months delay in its award.

The PMT has stated that there were no changes in the Harold critical path and the path still goes through the Force Account construction packages FHL01, FHL02, FHA01, and FHA02.

Observations:

ESA's critical path will go through CM005, 006, 007, and then a portion of CS179. The critical path work on contract CS 179 is dependent upon the substantial completion of contract CM007. Integrated System Testing (IST) and then Harold (LIRR) IST comprise the final section of the critical path. Table 4-3 below shows the current state of the critical path adjusted to take into account the delays induced by the CM012R bid cancellation. Please note that the PMOC has shown Contracts CM005, 006, and 007 as CM012R in one line with the duration of 54 months and NTP of October 1, 2013.

Table 4.3: Current State of Critical Path



The above table follows the exact logic as the May 2012 re-baselined schedule adjusted to take into account the new CM012R packages (CM005, 006, 007) duration of 54 months and nine month delay in awarding the package. One year of project contingency is included in the schedule; resulting in an adjusted RSD occurring in 4Q 2021.

Concerns and Recommendations:

As stated in Section 4.2, 90 Day Look-Ahead, above, the PMOC recommends that ESA develop performance metrics similar to that of the PMOC's to show its level of schedule achievement per quarter and to help identify schedule risk areas early on.

The analysis presented above indicates that the entire schedule contingency for the project has been used up by the delay due to the CM012R bid cancellation. The cancellation has resulted in a procurement delay of at least nine months (November 2012 to the August 2013 ESA forecast date for awarding the first of the new packages, CM005) and a new duration of 54 months for the three new packages (from 42 months in the CM012R package). Given the amount of remaining work on the project, this lack of contingency is a serious concern.

4.3 Schedule Contingency Analysis

Status:

IPS #45 indicates that the contingency in ESA is "TBD."

Observations/Analysis:

Based on the PMOC analysis, which is presented in Section 4.1 and 4.2, the PMOC believes that ESA does not have any schedule contingency.

Concerns and Recommendations:

Given the situation created by the cancellation of the CM012R package, the PMOC continues to recommend that ESA perform a detailed analysis of its future package schedules based on all three new contracts of CM005, 006, and 007 and establish interface milestone dates to create a new contingency plan. If the result is that most of the project contingency is utilized due to the repercussions of the bid cancellation, MTACC will have to evaluate the viability of the current baseline RSD. [Ref: ESA-98-Sep 12]

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

Status:

As of February 28, 2013, the ESA-PMT had not changed its total budget of $8.708B even though, based on the bids results for CM012R contract alone, the PMT should increase its budget or reduce their contingency almost entirely. [redacted] At meeting held on March 5, 2013, ESA provided a repackaging plan and its analysis of how bid risks were mitigated and provided a new forecast of $750M for the $950M bid.

[redacted]

Although the Standard Cost Categories (SCCs) haven't changed this month, during the previous months there had been significant shifting of costs across SCCs. It is unclear if this reflects ESA internal problems with the allocation of costs due to repackaging or reflects changes in work approach and methodologies such that they cross SCCs; ESA has not been providing any explanations for those changes. For the last several months, the total value of the SCCs has increased by $2 million from the re-baseline $8,708M to $8,710M; this most probably reflects ESA's unacknowledged understanding that the re-baseline value cannot be artificially maintained.

MTACC completed its revised project cost and schedule re-baseline in May 2012 and placed it in Standard Cost Category format in July 2012. Table 5.1 below shows a comparison of the MTA's Current Baseline Cost Estimate broken out in SCC vs. the FFGA baseline as of February 28, 2013.

Table 5.1: Comparison of Standard Cost Categories: FFGA vs. CBB

Standard Cost Category (SCC) No.	FFGA SCC baseline (YOE $) M	July 2, 2012 Re-baseline (YOE $) M	January 2013 SSC (YOE $) M	February 2013 SSC (YOE $) M	February 2013 % of Rebaseline	January'13 to February '13 Change $M	CBB Variance from FFGA %
10	1,989	2,943	2,942	2,942	99.97%	43	47.91%
20	1,169	1,514	1,484	1,484	98.02%	-91	26.95%
30	356	388	389	389	100.26%	0	9.27%
40	205	488	520	520	106.56%	19	153.66%
50	619	698	698	698	100.00%	29	12.76%
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%
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Subtotal	**6,813**	**8,708**	**8,710**	**8,710**	**100.02%**	**0**	**27.84%**
100	1,036	1,116	1,116	1,116	100.00%	0	7.72%
Total Project Cost (10 – 100)	**7,849**	**9,824***	**9,826**	**9,826**	**100.02%**	**0**	**25.19%**

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

Observations:

The re-packaging of scope has led to movement of costs across SCCs with no explanations or justifications provided by the ESA-PMT. Although ESA continues to show in its cost reports that the project total value is being held, it is having difficulty keeping the SCCs at the re-baseline level and must be aware that the probable total cost has risen significantly, and not only due to the CM012R overbid. The PMOC is concerned that the changes in SCCs occurred so quickly after a major re-baselining of cost and that it indicates a lack of success at Cost Control and Forecasting. 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. ESA has not attributed the changes made over the last several months in Categories 10, 20, 40 and 50 as either a function of construction methodology or has not given any other reason to justify cross SCC categories. Traceability of reasons for SCC modifications must be clear and identified not only to the PMOC but within the CCC reporting and in configuration management system. [Ref: ESA-106-Dec12]

As noted in earlier reports, the PMT had changed the scope and budget for Contract CM012R, however, they had not submitted the "Basis of Assumption" as it is stated in CMP Section 5.2, which calls for documentation of "un-retained risks, which is going to be passed on to the contractor." ESA-PMT did not do a re-estimate. They only looked at the 'Schedule E' items and did percentage reductions for 'mitigate risks'. The CMP states that an estimate should be provided to account for these risks. Furthermore, the CMP Section 5.7 "Monthly Update

Process" calls for documentation of a baseline cost, risk and contingency; however, the PMOC has not received such documentation.

In October 2012, the ESA project received four bids for the CM012R contract, ranging from $382M (60%) to $600M (100%) greater than the ESA estimate and a March 2013 ESA re-projection of the newly re-packaged scope at $200M over budget, plus two (2) estimates for CM005 at 14.6% above the newly projected values. Despite this, the PMT continues to maintain a budget showing the work will be done for the originally estimated amount. This also ignores the 8-month slippage in the bid date for the first CM012R sub-package and new schedule showing a 12-month increase in work duration.

Concerns and Recommendations:

The PMT should note all changes to cost-related reporting with reference to the SCC Budget Category and not simply identify budget transfers in terms of the contracts to which it has been assigned; a record of this discussion in the Change Control Committee should be provided**.** The PMOC has several times asked the PMT to incorporate their latest planning for CM012R into the Cost and Schedule projections but they have not, even though in March they did a presentation to the PMOC and FTA on the CM012R re-packaging which indicated costs nearly $200M about budget and a 20 month slippage (8 month for bid and 12 for the work) in the completion date.

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 PMOC additionally recommends that ESA 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 reconciliation of all packages for bid.

5.2 Project Cost Management and Control

Status:

ESA has reported that as of February 28, 2013, the actual total project progress was 53.8% vs. 54.9% planned progress resulting from the July 2012 re-baseline and the actual construction progress was 49.3% vs.51.0% planned based on invoiced amount; this also represents an increase of only 0.5% vs. the 0.8% construction progress planned for the month. It is almost an identical shortfall as last month.

Observation:

The PMT reports its progress, both for Construction and Total Project, as a function of only the "ESA" portion, excluding the Regional Investment (RI) portion. Since all the work is being performed together, that is a false dichotomy and the PMT should report on the progress of the full scope that is being contracted, independent of funding source. However, for consistency of comparison, at this point the PMOC will also report on the ESA portions. [redacted] The PMT must adjust its reporting to represent a true budget of ESA.

Table 5.2: Project Budget and Invoices as of February 28, 2013

Elements	Baseline Total Budget	Current Baseline Budget	Actual Award Value	Actual Invoiced	Actual % Budget Invoiced
Construction	$6,118,922,157	$6,116,922,157	$3,608,348,062	$3,091,752,839	50.53%
Soft Costs Subtotal	$2,126,077,843	$2,126,077,843	$1,424,432,370	$1,336,641,977	63.08%
Engineering	$671,029,379	$671,029,379	$616,687,281	$612,672,827	91.30%
OCIP	$173,913,620	$173,913,620	$141,909,815	$135,714,582	78.04%
Project Mgmt.	$762,816,530	$762,816,530	$557,658,260	$489,064,044	63.54%
Real Estate	$166,318,314	$166,318,314	$108,177,014	$103,611,400	62.29%
Rolling Stock (RS)	$202,000,000	$202,000,000	$0	$0	0.00%
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Subtotal w/o Financing and RI	$8,245,000,000	$8,243,000,000	$5,032,804,432	$4,432,815,692	53.76%
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Subtotal w RS	$8,708,000,000	$8,706,000,000	$5,032,804,432	$4,432,815,692	50.49%
RI Subtotal	$590,732,003	$590,732,003	$19,878,351	$13,461,263	2.30%
Construction (RI)	$475,016,081	$475,016,081	$19,667,479	$13,429,933	2.85%
Design (RI)	24,595,433	24,595,433	$210,872	$31,330	0.13%
OCIP (RI)	$16,939,198	$16,939,198	$0	$0	0.00%
Project Mgmt. (RI)	$24,181,291	$24,181,291	$0	$0	0.00%
Real Estate (RI)	$0	$0	$0	$0	-
Rolling Stock (RI)	$50,000,000	$50,000,000	$0	$0	0.00%
Subtotal w/o Financing	$9,298,732,003	$9,296,732,003	$5,052,682,783	$4,446,276,955	47.43%
Finance Charges	$1,116,453,993	$1,116,453,993	$512,333,815	$512,333,815	**45.89%**
Grand Total	**$10,415,185,996**	**$10,415,185,996**	**$5,565,016,598**	**$4,958,610,770**	**47.26%**

Concerns and Recommendations:

The PMT does not provide monthly cost reporting data in a unified report but in a series of update documents provided by separate PMT staff. 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. In addition, ESA insists that project performance metrics such as Earned Value CPI are not required, despite the fact that the CMP and AD.04 state this is a requirement. When the PMOC requested the pre-bid estimate data the PMT informed them it was retained in their system, and information is generally over-written in subsequent periods. The PMOC recommends that the PMT integrate its cost reporting into a single comprehensive document provided on a monthly basis, provide the performance metrics and utilize them in their projections and upgrade their systems database design and operational configurations to retain and use original data.

There is an inconsistency in ESA's progress report. The PMOC recommends that ESA define its construction budget excluding its management reserve and report the construction progress based on it. In addition, the PMT should use the FTA's agreed-to budget of ESA as $8.7B and report its total project progress based on this.

5.3 Change Orders

Status/Observation:

The PMT reported that during February 2013, there were 7 change orders over $100 executed, with a net value of $4.6M. The PMT did not provide a full Modification Log this month regarding any Modifications to the Consultant contracts.

As noted in the August 2012 PMOC report, ESA had introduced a budget line item named "allocated for mods" in its re-baseline budget of 2012 to adjust active packages budget for accepted change orders. In that way the EAC for each package has become the summation of package's award amount, allocated for mods amount, and post bid contingency. This budget pool, however, has not been defined in the Cost Management Plan; therefore, the PMOC considers it as post-bid contingency. The ESA PMT identified the Mod Allowance as the source of funding for each of the three (3) Budget Transfers executed this month.

The PMT has budgeted 17.2% for change orders in its EAC, however the PMOC analysis of the Change Orders to date plus a prorated approach to the Pending and Possible changes, shows a probable 18.8% variance for Change Orders. (See Appendix G-2 for Change Order status on Active Contracts.)

Concerns and Recommendations:

On a monthly basis, the PMOC provides a set of cost questions to the ESA-PMT in advance of the Monthly Cost Review meetings to provide time for preparation of responses. Unfortunately, those responses have often been very terse and not comprehensive, or dismissive of the need to provide the level of cost control and reporting committed to in the CMP or under MTACC AD.04. In some cases, the ESA-PMT does not have a response ready and indicates it will be forthcoming, which it often is not.

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.

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

Table 5.3: ESA's Change Order Log in February 2013 (>$100,000)

BA #	Package	Mod#	Description	Mod. Amount ($)	January 2013 package value ($)	February 13 Package value ($)
560	CH053	79	Q Tower Manhole and Pull box Relocation	**235,112**	**206,572,504**	**206,807,616**
561	CQ031	76	Credit for Amtrak's MCC Building	**(168,000)**	**791,786,154**	**791,786,154**
561	CQ031	80	Credit for Amtrak Easement	**(226,000)**	**791,786,154**	**791,786,154**
561	CQ031	82	Reconciliation of Bid Item No. 17	**(250,000)**	**791,786,154**	**791,786,154**
561	CQ031	83	Reconciliation of Bid Item No. 18	**(250,000)**	**791,786,154**	**791,786,154**
562	CM032	16	Additional Concrete Supports	**144,869**	**187,698,394**	**187,698,394**
562	CM032	17	Y and A Invert Slab and Bench	**5,100,000**	**187,698,394**	**187,698,394**

When multiple MODs are executed in same month for same contract, ESA supplied documentation does not indicate order of execution or values before or after that specific MOD.

The CH053 Modification was principally funded from Mod Allowance, CQ031 Mods by AWO Contingency, and CQ032 Mods from the package Scope Transfer sub-budget. The PMOC does not recognize sub-budgeting for Mod Allowance and Scope Transfer.

5.4 Project Funding

a) Federal Funding

As shown in Table 5.2, as of February 28, 2013, the PMT has awarded a total of $5.003B, in contract work. The Federal share of awarded contracts is $2.025B. The total Federal funding commitment as of February 2013 remained at $2.699 billion (See Appendix G.1 for re-baseline project cash flow and Appendix G.2 for detailed cost distribution)

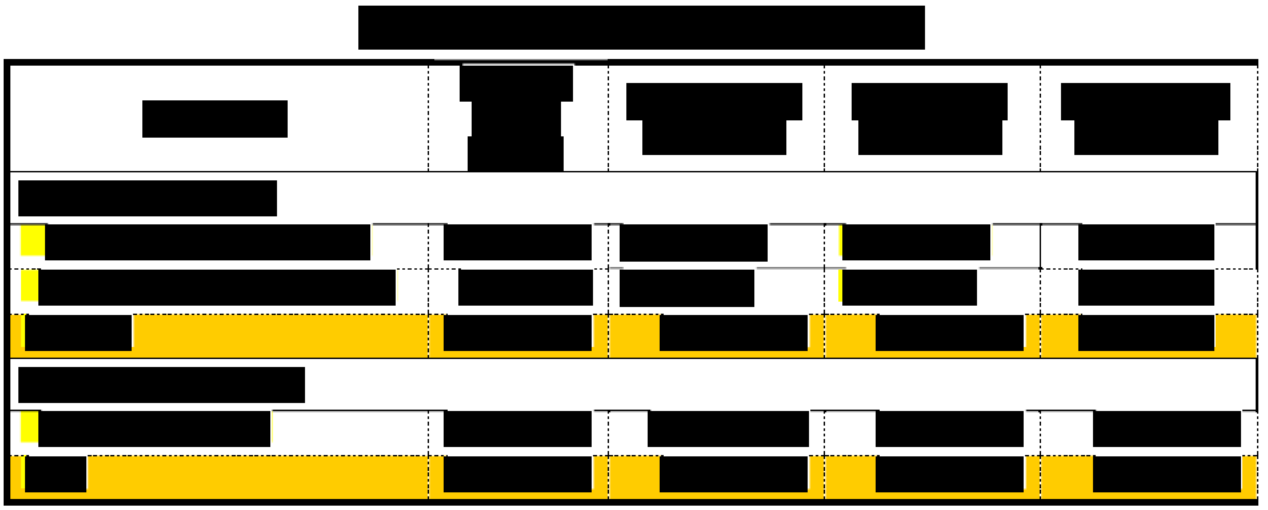
b) Local Funding

The obligated local share was $3.008B. There has been a $417,900,000 incurred finance cost (for local share) to date.

5.5 Cost Variance Analysis

This is covered in the discussions above.

[redacted]



6.0 RISK MANAGEMENT

6.1 Risk Mitigation Commitments

Status:

In the spring of 2012 MTACC completed a comprehensive risk assessment of the ESA project based on an internal cost and schedule re-baselining effort and issued a draft report on May 15, 2012. Concurrently in May 2012, the PMOC independently completed its update of the 2009 PG-47 Risk Assessment and issued its Risk Assessment Technical Memorandum in June 2012.

As a result of its internal risk analysis, MTACC presented a revised Cost Estimate and Revenue Service Date ("RSD") to the MTA Capital Program Oversight Committee with a budget of $8.245 billion (w/o financing cost and a portion of rolling stock to be procured through Regional Investment funds) and a RSD of August 2019. This baseline now set the base upon which regular and continued risk analyses are performed. This revised baseline budget and RSD reflect the decision by MTA's upper management to use the "low degree of mitigation" results from their internal risk assessment in May 2012.

In April 2013, the PMOC will be refreshing the 2012 PG-47 Risk Analysis to incorporate changes to the ESA Program that have recently occurred. Particular consideration will be given to the effect of the cancellation of the CM012R contract package procurement that occurred in October 2012. The PMOC will also be preparing a complementary evaluation of estimated ESA Cost and Schedule budgets, based primarily on historical project performance data.

Observations/Analysis:

In February2013, during the first regularly-schedule ESA Monthly Risk meeting, MTACC reported that the course of action for re-allocating the CM012R scope of work was still being evaluated. During the March 2013 ESA Monthly Risk Meeting, MTACC stated that the scope of work would likely be re-allocated among five contracts:

1. The existing contract CM004, by way of a Board-approved Change Modification (this change is scheduled for approval in April 2013);
2. The existing contract CM019, by way of a Board-approved Change Modification (this change was approved and Notice-to-Proceed {NTP} was given to the contractor in March 2013);
3. A new CM005 contract package to cover the South Structures (this package was advertised on March 21,2013);
4. A new CM006 contract package to cover the North Structures; scope and procurement schedule still being evaluated. ;
5. A new CM007 contract package for the cavern, scope and procurement schedule still being evaluated.

Concerns and Recommendations

While MTACC has provided an outline for the re-allocation of the scope that was previously part of the CM012R contract package, the PMOC is concerned that no comprehensive evaluation or presentation of the allocation of work, schedule, or cost impacts has been produced to date. Furthermore, the CM005 contract package was advertised in March 2013 without a Risk Assessment or Constructability Review performed. The ESA has a history of prolonged procurements where numerous questions develop, often leading to multiple addenda, bid postponements, and concerns from the contracting community. Aware of the overall schedule concerns facing ESA after the CM012R procurement cancellation, the PMOC reiterates the concern that ESA PMT's repackaging efforts will need to progress hastily, lending themselves to further redundancies, ambiguities, and errors, requiring further modifications and addenda to existing or future contracts.

By repackaging the work, some cost savings may be attained, but based on the results from a series of previous repackaging efforts on the ESA project, the PMOC believes that, ultimately,

the cost of completing all of the work previously associated with CM012R will exceed even the lowest bid received under this procurement, thus exacerbating the gap between the engineer's estimate and the ultimate cost. Further, there is likely to be significant increased coordination requirements in any repackaging effort. In the March 2013 Monthly Risk Meeting, MTACC admitted that new Interface Risks having a high probability of occurrence and impact, are major concerns resulting from the CM012R repackaging effort. The PMOC believes that the Baseline RSD date of August 2019 will move out along with a correlated increase in the Baseline Cost Estimate. The PG-47 Refresh, to be conducted by the PMOC in April 2013, will attempt to independently evaluate the impact of these events.

6.2 Risk Management Commitments

Status:

MTACC's risk management commitments are detailed in the RMP, Rev. 2.0 dated July 2012, which is a sub-plan within the ESA PMP. The RMP was updated to bring it into compliance with the ELPEP principles and requirements and based on reviews by the FTA and the PMOC. The PMOC completed its review of the revised RMP and has recommended conditional approval based on MTACC correcting an error and expanding discussion of certain risk and mitigation topics. FTA formally notified MTACC of its conditional acceptance of the RMP by letter dated March 4, 2013.

Observations/Analysis:

In February 2013, MTACC hosted the first Monthly Risk Meeting for ESA, which fulfills a commitment included in the RMP. The second monthly Risk Meeting was held in March 2013

Concerns and Recommendations:

As stated previously, the PMOC has suggested to MTACC that future Risk Workshops be scheduled in a way to allow invited participants to receive and evaluate current scope, schedule, and cost documentation prior to the meetings. Also, the Workshops should be scheduled far enough in advance of the intended procurement cycle to allow for evaluation of risk results, and the potential for refinements to project support documents.

6.3 Current Risk Mitigation Actions

Status:

The ESA-PMT has continued to identify and attempt to mitigate risks that may adversely affect the Program's future cost and schedule performance. Ongoing and recent significant risk mitigation initiatives include the following:

1. During the CH057A Risk Workshop, it was evident that MTACC has engaged the external stakeholders (e.g. Amtrak) that are critical to the success of the project. Further, the plans to have an advanced concrete slab constructed during a 30 day track outage in July 2103 to protect the CM057A tunneling efforts should mitigate some of the coordination/resource allocation risk that would most likely have occurred if the slab was constructed in 2014 as previously planned.
2. The PMT has prepared and advertised the first Contract Package, CM005, for rebid of the CM012R scope of work. This construction package will focus on the final structures on final structures south of the caverns and invert preparation in the caverns.

3. During the March 2013 Monthly Risk Meeting, MTACC provided an example of using "lessons learned" in installing low vibration track (LVT) from another current and relevant Capital Project (No. 7 Line Extension) to benefit the ESA track installation work.

Observation/Analysis:

While obtaining lessons learned in installing LVT; the PMOC notes that the bigger risk to the ESA Program with respect to LVT is the potential Buy America issue that may delay the track procurement and installation. This aspect of LVT needs to be looked at from a risk perspective.

Concerns and Recommendations:

The PMOC recommends that in light of the recent CM012R re-packaging efforts, the PMT revisit its efforts in performing an overall ESA cost and schedule review, within the framework of the Risk Management Plan, and in accordance with current project configuration change control, to confirm the effectiveness of these mitigation actions.

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	Project Quality Manual (PQM): The latest version of the ESA Project Quality Manual (PQM), Revision 6, issued in February 2009, was found to be acceptable. Status Update: The ESA Quality Manager had committed to revise it by the end of February 2013 to incorporate changes to the ESA Quality System that have occurred since then. This commitment was not met. The ESA Quality Manager stated that other issues took priority and that the PQM will now be revised by the end of April 2013 (one month slip from last month). Recommendation: Although the latest version of the PQM has been accepted, the PMOC believes that it would be beneficial to update this document to reflect changes that have occurred during the past four years.	2
ESA-95-Sep12	2.3 Construction: Queens	Contract CQ032: 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. Status Update: The CM009/019 turnover was completed in January 2013. As of March 31, 2013, the CQ031 turnover has been completed but the remaining portions of the CQ039 area turnover continues to be delayed and the forecast overall impact of all of the turnover delays is 10 months. Recommendation: The PMOC recommends that the MTACC PMT, working with the CQ032 and CQ039 contractors and the respective ESA construction managers, continue their efforts to expedite turnover the remaining CQ039 work area.	1
ESA-96-Sep12	1.5 Safety and	Safety Certification Process: 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	2

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
	Security	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. Status Update: As of the end of March 2013, the PMOC has not seen a calendar produced for Safety Certification Committee meetings for 2013. Recommendation: 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 stakeholder's having representation on the committee.	
ESA-98 Sep 12	4.4 Schedule Contingency Analysis 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: On March 19, 2013, MTACC provided to the FTA and the PMOC their proposed revisions to the ELPEP. Recommendation: MTACC needs to finalize the ELPEP document and incorporate new contingency drawdown plans based on the current state of the project..	1
ESA-99-Dec12	5.2 Project Cost Management and Control	The PMOC is concerned about the lag of invoiced amount for construction and total project to date compared to the Forecast amount in the re-baseline cash flow. This continues the trend of ESA historically not keeping up with its monthly expenditure plans. Status Update: Cash flow curve has not been extended out as of the end of January 2013. Recommendation: ESA should reforecast its monthly cash flow curve, linking to the adjusted schedule forecast, and extend the likely date for the end of the payout curve.	1
ESA-100-	1.6 Quality	As-Builts: The contractor working on the CH053, CH054A, and CQ032 contracts continues to be late in submitting As-Built drawings.	2

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
Dec12		Status Update: The ESA Quality Manager conducted QA/QC surveillances of these Contracts on January 11, 2013 and all three contracts had additional findings besides being delinquent with submitting As-Builts. Since the Contractor has not responded to the surveillance reports, and has still not submitted As-Builts in the correct format, the ESA Quality Manager will be issuing Nonconformance Reports in April 2013. Recommendations: The PMOC recommends that ESA press to bring this issue to closure.	
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. Status Update: The LIRR has begun development of its Site Specific Work Plans (SSWPs) for the track work that will be done during the concrete slab installation in July 2013, although it was not complete as of March 31, 2013. Recommendation: The PMOC recommends that the LIRR complete development of the aforementioned SSWP as quickly as possible so that it can begin development of the SSWPs required for the additional turnouts to be installed in 2013 and then begin development of the 2014 SSWPs immediately thereafter.	2
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. Status Update: As of the end of March 2013, the impact of these delays on the overall project schedule has not been determined. Recommendation: The ESA PMT needs to determine the impact to the overall project schedule of the delays to the procurements referenced above.	1
ESA-103-	2.1 Engineering	The GEC and PMT continue to consistently miss all of its target dates for remaining design activities on the project. In several instances (CM014B; CH057), this has	2

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
Dec12	Design	resulted in delaying the procurement packages. Status Update: As of the end of March 2013, the PMT has not developed a design milestone tracking sheet. Recommendation: 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.	
ESA-104-Mar13	1.6 Quality	Concrete: Analysis by the PMOC determined that concrete nonconformances were specifically related to the performance of the concrete suppliers and the preparation of concrete at the batch plant. Sometimes slump, air entrainment, or concrete break tests were out of specification. Recommendation: The PMOC recommends that periodic monitoring of the concrete be performed at the batch plant and that the field verifies that the specified design mix matches the site delivery tickets. It is further recommended that this should be performed in concert with the Engineer of Record's review of the laboratory test cylinder break results.	2
ESA-105-Dec12	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 Recommendation: The PMOC recommends that MTACC prioritize development of a recovery plan.	1
ESA-106-Dec12	5.6 Project Cost Contingency Analysis	Contract CM012: The PMOC is concerned about the potential cost and schedule impacts to the program from the Bid received in October 2012 which were approximately $380M over the Expected Bid Amount. Status Update: In March 2013 ESA showed how they believe they can reduce that by $200M while extending the duration to 54 months (not counting the delay for the repackaging). Unfortunately two independent estimates for the first package (CM005) are nearly 15% above the ESA projections. This would lead to a probable total savings of $90M against the $380M overrun. In the PWE March 2013 Report, it appears ESA	1

Number/ Date Initiated	Section	Issues/Recommendations	Criticality
		has transferred $105M in scope from CM012 to CS179 but no Budget Transfer authorization has been provided, no new packages are listed, no new cost projections above the Oct 2012 values, and the Contingency value is unreduced. Recommendation: The PMOC recommends that the ESA PMT re-evaluate its projection of reducing the CM012R cost overrun by $200 million.	

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.	1	4/15/13
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 #45 has not been updated fully, and therefore the critical metrics have not been completely developed by the PMT.	2	1/31/13
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.	2	6/30/13

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
CCM	Consultant Construction Manager
CM	ESA Construction Manager assigned to each contract
CMP	Cost Management Plan
CPOC	Capital Program Oversight Committee
CR	Candidate Revision
CSSR	Contact Status Summary Report
CIL	Central Instrument Location
CPRB	Capital Program Review Board
CPP	Contract Packaging Plan
DCB	Detailed Cost Breakdown
ELPEP	Enterprise Level Project Execution Plan
EPC	Engineering-Procurement-Construction
ERT	East River Tunnel
ESA	East Side Access
ET	Electric Traction
FA	Force Account
FAMP	Force Account Management Plan
FHACS	"F" Harold Alternate Control System
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
GCT	Grand Central Terminal
GEC	General Engineering Consultant
HTSCS	Harold Tower Supervisory Control System
IEC	Independent Engineering Consultant (to MTA)
IFB	Invitation for Bid

IPS	Integrated Project Schedule
IST	Integrated System Testing
LIRR	Long Island Rail Road
MNR	Metro-North Railroad
MTA	Metropolitan Transportation Authority
MTACC	Metropolitan Transportation Authority Capital Construction
N/A	Not Applicable
NTP	Notice-to-Proceed
NYAR	New York and Atlantic Railroad
NYCDEP	New York City Department of Environmental Protection
NYCDOB	New York City Department of Buildings
NYCT	New York City Transit
NYSPTSB	New York State Public Transportation Safety Board
OCO	Office of Construction Oversight (MTA)
PE	Preliminary Engineering
PEP	Project Execution Plan
PMOC	Project Management Oversight Contractor (Urban Engineers)
PMP	Project Management Plan
PMT	Project Management Team
PQM	Project Quality Manual
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

APPENDIX B-- PROJECT OVERVIEW AND MAP

Project Overview and Map – East Side Access

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 ($YOE) at Approval Entry to PE
4,350 million	Total Project Cost ($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
4,294.6 million	Amount of Expenditures as of February 28, 2013 based on the Total Project Budget of $8,708 million
49.3	Percent Complete based on the current budget of $8,708 million and expenditures in the February 28, 2013 report
[redacted]	[redacted]
49.3*	Construction Percent Complete
53.8*	Overall Project Percent Complete

*As of February 28, 2013, based on the revised baseline (May 2012) [redacted]

APPENDIX C – LESSONS LEARNED

#	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.

APPENDIX E – SAFETY AND SECURITY CHECKLIST

Project Overview			
Project mode (Rail, Bus, BRT, Multimode)	Rail		
Project phase (Preliminary Engineering, Design, Construction, or Start-up)	Construction		
Project Delivery Method (Design/Build, Design/Build/Operate/Maintain, CMGC, etc.)	Primarily Design Bid/Build		
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		NA
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?	N	The NYS SSOA does not attend. Grantee to transmit SSMP to SSOA through the Grantee's System Safety Dept.
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.
Has the grantee implemented security directives issues by the Department Homeland Security, Transportation Security Administration?	Y	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	In review by MTACC Assistant Chief of Safety	The Grantee updated the SSMP as of 12/2010. A current update is to be

Project Overview		
necessary?	and Security.	undertaken in the second quarter of 2013.
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.
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.
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

Project Overview		
		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?	N	Needs to be verified
Does the grantee implement regularly scheduled meetings to track to resolution any identified hazards and/or vulnerabilities?	Y	Safety Certification 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.
Does the grantee ensure the conduct of preliminary hazard and vulnerability analyses? Please specify analyses conducted.	Y	The Safety Certification Committee reviews preliminary hazard analyses, however it is not clear who reviews the security by the TVRA,
Has the grantee ensured the development of safety design criteria?	Y	The GEC has established the safety design criteria, which is then reviewed by the Safety Certification Committee.

Project Overview		
Has the grantee ensured the development of security design criteria?	Y	No indication as to how this is done.
Has the grantee ensured conformance with safety and security requirements in design?	Y	Safety requirements are reviewed Safety Certification Committee process. Not clear how security requirements are reviewed.
Has the grantee verified conformance with safety and security requirements in equipment and materials procurement?	N	The grantee has not verified conformance for materials procured to date.
Has the grantee verified construction specification conformance?	Y	Through ongoing contract review by CMs.
Has the grantee identified safety and security critical tests to be performed prior to passenger operations?	N	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 Program Plan. PMOC is awaiting a status update report form the Grantee.
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	
Has the grantee ensured the performance of safety and security analyses for proposed workarounds?	In Development	

Project Overview		
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 prepared by the Grantee in 11/2010. The Emergency Preparedness Plan is now being developed into an Emergency Action Plan (EAP). The EAP operational readiness group has been finalized to include MNR, LIRR, MTAPD, and FDNY. The first meeting took place in March of 2013. The PMOC was not invited to this meeting. Moving forward, the PMOC will be included.
Has the grantee issued final safety and security certification?	N	Project is not at this stage.
Has the grantee issued the final safety and security verification report?	N	Project is not at this stage.

APPENDIX F – ON-SITE PICTURES

(to be sent in a separate file)

APPENDIX G

COSTAND SCHEDULE ANALYSIS TABLES

Table G-1: ESA Planned Cash Flow

Quarter/year	Construction $(000)	Engineering $(000)	OCIP $(000)	Project Mgmt. $(000)	Real Estate $(000)	Rolling Stock $(000)
Remaining	**3,378,075**	**72,979**	**70,377**	**320,650**		**665,000**
2Q2012	0	0	0	0	0	0
3Q2012	222,294	4,316	6,491	19,004	27,996	0
4Q2012	210,086	4,316	0	19,231	12,762	0
1Q2013	197,258	4,222	13,158	18,693	100	0
2Q2013	140,095	4,269	0	18,300	100	0
3Q2013	88,877	4,316	0	17,696	25,065	0
4Q2013	107,716	4,316	0	17,842	0	133,000
1Q2014	133,847	2,451	16,724	18,016	0	2,015
2Q2014	187,386	2,478	0	17,870	0	6,045
3Q2014	231,954	2,506	0	17,244	0	50,761
4Q2014	253,979	2,506	0	17,000	0	50,761
1Q2015	260,374	2,451	18,186	16,146	0	50,761
2Q2015	270,030	2,478	0	15,630	0	50,761
3Q2015	272,517	2,506	0	14,082	0	50,761
4Q2015	246,154	2,506	0	13,742	0	50,761
1Q2016	194,243	2,478	15,818	12,390	0	50,761
2Q2016	143,159	2,478	0	12,046	0	50,761
3Q2016	90,925	2,506	0	11,260	0	50,761
4Q2016	50,410	2,506	0	11,109	0	67,091
1Q2017	25,987	2,451	0	8,481	0	0
2Q2017	14,425	2,478	0	7,519	0	0
3Q2017	10,051	2,506	0	6,377	0	0
4Q2017	9,116	2,506	0	5,352	0	0
1Q2018	5,911	2,451	0	3,497	0	0
2Q2018	5,439	2,478	0	1,649	0	0
3Q2018	4,584	2,506	0	379	0	0
4Q2018	1,256	0	0	94	0	0
1Q2019	0	0	0	0	0	0
2Q2019	0	0	0	0	0	0
3Q2019	0	0	0	0	0	0
4Q2019	0	0	0	0	0	0
Subtotal	**3,378,075**	**72,979**	**70,377**	**320,650**	**66,023**	**665,000**

Table G-2: Approved Project Change Orders Status & EAC as of February 28, 2013 (Active 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)	[redacted]
CM004	40,765	1,549	51	37,189	42,314	3.80%	87.89%	4.32%	62,846	[redacted]
CM009	427,954	-25,349	39	388,733	402,604	-5.92%	96.55%	-6.13%	402,773	[redacted]
CM013	94,335	972	24	73,669	95,327	1.03%	77.28%	1.33%	97,854	[redacted]
CM013A	56,044	0	0	2,843	56,044	0.00%	5.07%	0.00%	59,155	[redacted]
CM019	734,000	38,184	55	750,766	772,184	5.20%	97.23%	5.35%	791,633	[redacted]
CQ031	648,884	107,138	72	682,797	756,022	16.51%	90.31%	18.28%	784,964	[redacted]
CQ039	84,950	13,991	19	93,295	98,941	16.47%	94.29%	17.47%	102,503	[redacted]
Total	**2,086,932**	**136,485**	**260**	**2,029,292**	**2,223,436**	**6.54%**	**91.27%**	7.17%	**2,301,728**	[redacted]
System and Finishes Contracts										
CM014A	43,502	151	4	14,869	43,653	0.35%	34.06%	1.02%	51,992	[redacted]
VM014	24,170	205	4	24,375	4,000	0.85%	609.38%	0.14%	53,359	[redacted]
Underground or Aboveground Structure Contracts										
CQ032	147,377	18,679	18	28,748	28,748	12.67%	100.00%	12.67%	282,876	[redacted]
Harold Railroad Structure										
CH053	137,280	69,292	98	156,519	206,807	50.47%	75.68%	66.69%	282,876	[redacted]
CH054A	21,778	4,073	27	18,490	25,851	18.70%	71.53%	26.15%	60,108	[redacted]
VQ065	2,748	0	-	545	2,748	0.00%	19.83%	0.00%	2,748	[redacted]
Total	**376,855**	**92,400**	**151**	**243,546**	**311,807**	**24.52%**	**78.11%**	31.39%	**733,959**	[redacted]
Force Account Contracts										
FHA01	9,500	1,500	1	16,685	16,824	15.79%	99.17%	15.92%	16,685	[redacted]
FHA02	9,706	0	-	24,874	30,352	0.00%	81.95%	0.00%	40,538	[redacted]
FHL01	28,781	0	-	17,483	21,972	0.00%	79.57%	0.00%	21,866	[redacted]
FHL02	7,351	0	-	20,606	24,415	0.00%	84.40%	0.00%	64,497	[redacted]
FMM19	31,814	0	-	26,300	31,309	0.00%	84.00%	0.00%	31,423	[redacted]
VHA02	NA	0	-	5,406	8,033	0.00%	67.30%	0.00%	11,943	[redacted]

VHL02	NA	0	-	10,807	16,011	0.00%	67.50%	**0.00%**	**23,734**	[redacted]
VH051A	25,840	0	2	11,143	26,026	0.00%	42.81%	**0.00%**	**30,667**	[redacted]
VH051B	5,354	1,776	4	6,175	7,130	33.17%	86.61%	**38.30%**	**8,709**	[redacted]
Total	**118,346**	**3,276**	**7**	**139,480**	**182,072**	**2.77%**	**76.61%**	**3.61%**	**250,062**	[redacted]
Construction W/O FA Total	**2,463,787**	**228,885**	**411**	**2,272,838**	**2,535,243**	**11.43%**	**77.72%**	**14.70%**	**3,035,687**	[redacted]
Grand Total	**2,582,133**	**232,161**	**418**	**2,412,318**	**2,717,315**	**11.52%**	**72.04%**	**15.98%**	**3,285,749**	[redacted]

Table G-3: Federal and Local Funding Distribution

		FFGA 2006				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 (X$000)	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
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	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-4: Procurement and Construction Schedule Comparison of Future Packages

Contract Number		Procurement							Construction		
		Procurement Method	Advertise	Initial Bid Period	Advertised Bid Date	Addendum Period	Expected Bid Date	Award Period	Notice to Proceed	Project Period	Substantial Completion
		RFP or IFB	*Forecasted Date*	*Duration*	*Forecasted Date*	*Duration*	*Forecasted Date*	*Duration*	*Forecasted Date*	*Duration*	*Forecasted Date*
CM005	Current Month	IFB	3/15/2013	9 Weeks	5/17/2013	*4 Weeks*	6/15/2013	7 Weeks	8/1/2013	24 Months	7/31/2015
CM012	Current Month	IFB	**3/5/2012**	*9 Weeks*	5/8/2012	*9 Weeks*	**9/30/2012**	*9 Weeks*	**12/1/2012**	42 Months	**6/3/2016**
	Baseline 2012		3/15/2013	*9 Weeks*	5/17/2013	*9 Weeks*	6/15/2013	*7 Weeks*	8/1/2013	54 Months	2/3/2018
CM014B	Current Month	IFB	**TBD**								
	Baseline 2012		9/15/2012	*12 Weeks*	12/8/2012	*6 Weeks*	1/21/2013	*10 Weeks*	4/1/2013	57 Months	1/4/2018
CM015	Current Month		**TBD**								
	Baseline 2012		8/8/2014	11 Weeks	10/21/2014	6 Weeks	12/1/2014	4 Weeks	1/1/2015	31 Months	7/31/2017
CQ033	Current Month	IFB	**12/1/2013**	14 Weeks	**3/9/2014**	*6 Weeks*	**4/20/2014**	11 Weeks	**7/6/2014**	40 Months	**11/17/2017**
	Baseline 2012		5/24/2013	14 Weeks	9/1/2013	6 Weeks	10/15/2013	11 Weeks	1/2/2014	40 Months	5/1/2017
CH057	Current Month	IFB	**2/1/2013**	**8 Weeks**	**3/28/2013**	*6 Weeks*	**5/9/2013**	**4 Weeks**	**6/5/2013**	**34 Months**	**4/7/2016**
	Baseline 2012		10/1/2012	10 Weeks	12/8/2012	6 Weeks	1/20/2013	6 Weeks	3/1/2013	37 Months	4/15/2016
CH057-Part A	Current Month	On Call Contract	**On Call Contract Procurement (1/1/2013 ~ 4/1/2013)**						**4/1/2013**	**6 Months**	**10/6/2013**
	Baseline 2012		*N/A*		*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*

CH057A	Current Month	IFB	**4/8/2013**	7 Weeks	**5/24/2013**	**6 weeks**	7/2/2013	4 Weeks	8/1/2013	26 Months	9/25/2015
	Baseline 2012		*3/22/2013*	*7 Weeks*	*5/9/2013*	*8 Weeks*	*7/2/2013*	*4 Weeks*	*8/1/2013*	*26 Months*	*9/25/2015*
CH057	Current Month	IFB	7/3/2013	8 Weeks	8/28/2013	10 weeks	11/4/2013	4 Weeks	12/4/2013	29 Months	5/19/2016
	Baseline 2012		*7/3/2013*	*8 Weeks*	*8/28/2013*	*10 Weeks*	*11/4/2013*	*4 Weeks*	*12/4/2013*	*29 Months*	*5/19/2016*
CH058	Current Month	IFB	**2/8/2013**	**12 Weeks**	**5/3/2013**	8 weeks	**6/28/2013**	47 Weeks	**5/24/2014**	**33 Months**	**3/1/2017**
	Baseline 2012		4/8/2013	12 Weeks	7/1/2013	8 Weeks	8/28/2013	9 Weeks	11/1/2013	46 Months	9/16/2017
CH059	Current Month	IFB	6/8/2015	12 Weeks	8/31/2015	6 weeks	10/15/2015	**62 Weeks**	**12/21/2016**	14 Months	**2/15/2018**
	Baseline 2012		*6/8/2015*	*12 Weeks*	*8/31/2015*	*6 Weeks*	*10/15/2015*	*62 Weeks*	*12/20/2016*	*14 Months*	*2/14/2018*
CH061	Current Month	IFB	3/1/2013	**8 Weeks**	4/24/2013	**6 weeks**	6/8/2013	**8 Weeks**	8/1/2013	**17 Months**	12/31/2014
	Baseline 2012		3/1/2013	8 Weeks	4/24/2013	6 Weeks	6/8/2013	8 Weeks	8/1/2013	17 Months	12/31/2014
FHA02	Current Month	Force Account	**n/a**	n/a	n/a	n/a	n/a	n/a	n/a	n/a	**10/6/2014**
	Baseline 2012		*9/10/2012*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*N/A*
FHA03	Current Month	Force Account	**n/a**	n/a	n/a	n/a	n/a	n/a	**9/15/2014**	**12 Months**	**9/16/2015**
	Baseline 2012		*8/30/2012*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	7/21/2014	19 Months	3/2/2016
	Current Month		**n/a**	n/a	n/a	n/a	n/a	n/a	**9/8/2014**	**12 Months**	**9/16/2015**
	Baseline 2012		*10/4/2012*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*N/A*	*N/A*	*N/A*
FHL03	Current Month	Force Account	**n/a**	n/a	n/a	n/a	n/a	n/a	**5/13/2013**	**42 Months**	**11/4/2016**
	Baseline 2012		*9/4/2012*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	4/18/2013	50 Months	6/9/2017
FHA04	Current Month	Force Account	**n/a**	n/a	n/a	n/a	n/a	n/a	**1/21/2015**	**25 Months**	**2/10/2017**

FHL04	*Baseline 2012*		*3/28/2013*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	11/20/2014	33 Months	8/11/2017
	Current Month	Force Account	n/a	n/a	n/a	n/a	n/a	n/a	**1/21/2015**	**25 Months**	**2/10/2017**
	Baseline 2012		*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	*1/14/2015*	*25 Months*	*2/9/2017*
	Current Month	Force Account	**n/a**	n/a	n/a	n/a	n/a	n/a	**7/24/2014**	**31 Months**	**3/5/2017**
	Baseline 2012		*3/28/2013*	*n/a*	*n/a*	*n/a*	*n/a*	*n/a*	2/7/2014	46 Months	12/17/2017
CS179	Current Month	RFP	5/9/2011	32 Weeks	n/a	n/a	**9/25/12 (Request of BAFO)**	n/a	**TBD**	**TBD**	**7/24/2018**
	Baseline 2012			*32 Weeks*	*n/a*	*n/a*	8/25/12 (Request of BAFO)	*n/a*	11/1/2012	66 Months	4/25/2018
CS284	Current Month	**TBD**									
	Baseline 2012		*10/15/2012*						*5/1/2013*	*2/28/1900*	*4/25/2018*

CQ033 NOTE:	*CQ033 Design has been pushed for 2 reasons 1) design resources have been working on priority force account packages, and 2) the Montauk Cutoff has been added to the West End Alignment, which is causing a revision to the design.*
CH057 NOTE:	*CH057 Splitting the contract into three pieces is going into the CCC. Package and schedule will be included in the next month report. (IPS bar chart has included three packages)*
CH058 NOTE:	*Procurement schedule will be adjusted in the next month following the completion of CH057 contract split.*
CH059 NOTE:	*A scope reconciliation meeting with Amtrak took place in March.*
FHA03 NOTE:	*FHA03A was generated per request from Amtrak. That scope is being included in the FHA03 package - Final meeting with Amtrak is scheduled for early April*
FHL03 NOTE:	*Final design is waiting on concurrence with FHA03*
FHA04 NOTE:	*FHA04 was pushed out so that design resources could focus on FHA03A, CH057A, CH057, which are higher priority packages.*
FHL04 NOTE:	*FHL04 was pushed out so that design resources could focus on CH057A, CH057, which are higher priority packages.*
CS179 NOTE:	*Negotiations with CS179 candidates are ongoing, NTP is TBD*

Table G-5: Active Packages Schedule Slippage

Contract	Original Duration	NTP	Baseline S.C.	Projected S.C.	Projected Duration	Schedule Slippage	Percentage of Slippage because of scope transfer
CM004	713	15-Jul-09	28-Jun-11	1-Sep-13	1509	111.64%	0.00%
CM009	1482	10-Jul-06	31-Jul-10	1-Jun-13	2518	69.91%	0.00%
CM013	879	4-Jan-10	1-Jun-12	31-Jul-13	1304	48.35%	0.45%
CM014A	535	7-Nov-11	25-Apr-13	16-Oct-13	709	32.52%	0.00%
CM019	1460	1-Apr-08	31-Mar-12	6/1/2013	1887	29.25%	15.34%
CQ031	1100	3-Aug-09	7-Aug-12	12/30/2013	1610	46.36%	12.55%
CQ032	1100	8/10/2011	8/14/2014	7/7/2015	1427	29.73%	15.37%
CQ039	1418	9/26/2010	8/14/2014	7/7/2015	1745	23.06%	0.00%
CH053	1127	2-Jan-08	2-Feb-11	7/2/2014	2373	110.56%	3.48%
CH054A	483	4-Aug-09	30-Nov-10	12/19/2013	1598	230.85%	1.64%
						73.22%	

Table H-1 -- Core Accountability Items – March 2013

Project Status:		Original at FFGA	Current*	ELPEP **
Cost	Cost Estimate	$7.386B	$9.824B	$8.119B
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
	[redacted]	[redacted]	[redacted]	[redacted]
Schedule	Revenue Service Date	December 31, 2013	September 2019	April 30, 2018
Total Project Percent Complete	Based on Expenditures	53.8 ***		
	Based on Earned Value	NA		

Major Issue	Status	Comments
Major Upcoming Procurements	Scope from cancelled CM012R (Manhattan Structures 2) solicitation is being split among existing and three new contract packages. Work from CM012R package is on the project critical path. First new contract package (CM005) was advertised on March 21, 2013.	Results of this procurement have a major impact on project cost and schedule baseline. ESA is currently working on developing the remaining two contract packages (CM006, CM007). Impact on project cost and schedule contingency remains TBD.
Major Upcoming Procurements	Package CH057 was split into 3 parts and CH057A is expected to be bid in April 2013. Procurement of CS179 (Systems Package 1) continues to slip. Latest NTP forecast date of April 1, 2013 will not be met. Other System Packages (CS284 and VS086) procurement dates are now TBD; as well as procurement dates for CM014B package.	CH057A is necessary to advance the Harold work however the Change Order being given to the CQ031 contract for the support slab is critical for a July/August 2013 Outage. CS179 is on the project critical path (since Jan. 1, 2013) and current delay will impact project schedule contingency.
Project Schedule	Project IPS has not been completely updated since October 2012.	Until the remaining contingency is determined; and TBD dates for major procurements determined; and the IPS fully updated; it is not possible to properly assess the viability of the current baseline schedule.
Amtrak East River Tunnel Work	Amtrak original plan for two tunnel outages during 2012 was changed to one tunnel due to a	ESA re-baseline was initially based on two tunnel outages. Impact (if any) on new baseline

	track replacement program initiated by Amtrak as a result of a broken rail Schedule impact review has not yet been submitted to the FTA. Work on the tunnels ceased at the end of October 2012 as a result of hurricane Sandy and resumed in January 2013.	has to be evaluated and impact of ERT shutdowns as a result of the storm will also have to be evaluated. ESA is currently scheduling work around one tunnel outage.
Amtrak Integrated Master Schedule	Develop an integrated master schedule that will lay out the upcoming Amtrak projects (Moynihan, ERT Track Rehab., Brookfield, etc.) and overlay the ESA work at Harold. This schedule has not yet been provided to the FTA.	This issue has been outstanding since MTACC committed to producing the Integrated Master schedule in June 2012. At the March 21, 2013 FTA/MTACC Executive Meeting, the ESA Project Executive stated that they have an ESA staff member coordinating this activity on a part-time basis until a dedicated scheduler is hired.
Next Quarterly Meeting:	June 2013 (tentative)	

* Note that $9.824B (finance included) and the September 2019 RSD are the MTA cost and schedule baselines in the FFGA amendment.

** 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 invoiced and project value [redacted]