PMOC MONTHLY REPORT

East Side Access (MTACC-ESA) Project

Metropolitan Transportation Authority
New York, New York

Report Period October 1 to October 31, 2014



PMOC Contract No. DTFT60-09-D-00007

Task Order No. 7, Project No. DC-27-5235, Work Order No. 2

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

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THIRD PARTY DISCLAIMER

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

REPORT FORMAT AND FOCUS

This report is submitted in compliance with the terms of the Federal Transit Administration (FTA) Contract No. DTFT60-09-D-00007, Task Order No. 007. Its purpose is to provide information and data to assist the FTA as it continually monitors the grantee's technical capability and capacity to execute a project efficiently and effectively, and hence, whether the grantee continues to be ready to receive federal funds for further project development.

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

MONITORING REPORT

1.0 PROJECT STATUS

a. Design

As of the end of September 2014, MTACC reported that the overall Engineering effort was 98.3% complete, based on Earned Value for Design Deliverables, the same as the previous month. Their Cost Report shows 86.8% of the overall EIS & Engineering category as invoiced and 86.8% of the budgeted section titled "Design" (including Design Settlement) as having been invoiced. These figures are below last month's due to previous calculation errors.

The signed and sealed CM007 deliverable that was scheduled for October 17, 2014 was postponed to allow the incorporation of ongoing Proposal for Change Orders (PCOs) and to allow the GEC to focus on the scope transfer effort moving the GCT Station Cavern lower level walls to Contract CM005. On October 15, 2014, the PMT presented the proposed Bellmouth Structure scope transfer to the Change Control Committee. The Bellmouth Structure scope transfer from CM012A to CM007 was approved.

Anticipated advertise date for the CH057 package was previously forecast for July 2014 with NTP forecast for September 2014. The forecast advertise date was not met. The PMT is

continuing to work on Division 1 issues in the specifications. The forecast advertise date is now sometime in December 2014.

The 90% CH058 design submission package was made in early September 2014 and the 100% is planned for November 2014. The 100% design is anticipated for December 2014. A PCO was issued to the GEC to develop a new, stand-alone package CH061A (Tunnel 'A' and 'D' Construction). Negotiation with the GEC has been concluded and a contract modification is in process. Some additional scope transfers from CH053 & CH054A are being considered by ESA Management.

ESA continues to experience slippage in design completion and advertise dates across a number of packages.

b. Procurement

As of the end of September 2014, the Cost Report showed total procurement activity on the project as 62.9% complete, with \$6.405 billion in contracts awarded out of the \$10.178 billion current reported budget.

CM014B was advertised as an RFP on May 6, 2014 and MTACC continued in the procurement process. Technical and Cost Proposals were submitted, respectively, on August 26, 2014 and September 9, 2014. Addendum #11 was issued on October 6, 2014 to clarify contract requirements and to answer Contractor questions. The top eight proposers were interviewed by the Selection and Technical Committee members on October 8 to 14, 2014. Addendum #12 will be issued in early November 2014 to the top ranked firms for preparation of an amended cost proposal, which will lead to a final ranking and determination of the top firm(s). The PMT previously forecast that recommendation for award would be ready to present to the MTA Board in November 2014, however, at this point, it is clear that this will not happen. Given the number of proposers and previous durations for negotiating a Best and Final Offer on a complex negotiated procurement, the PMOC believes that this Contract will not be awarded until early 2015 at the earliest.

Due to the concurrent procurements of Contracts CM014B and CS084, the PMT decided to revise the target advertisement date for CM007 from October 1, 2014 to November 18, 2014. The PMT will not meet this date.

Bids for the CS084 Contract were opened on September 11, 2014. The Qualification Hearing was held on September 19, 2014, and Notice Award was issued on October 29, 2014.

The PMT remains undecided as to how to procure the signal installation work currently in a stand-alone package, CS086. The latest thinking is that the package will remain stand-alone, but this decision is still not finalized.

c. Construction

The PMT reported in its September 2014 Quarterly Progress Report that the total construction progress reached 51.3% complete vs. 52.0% planned, the same as the previous month but an increase of 0.7% over the last quarter. (the PMOC calculations from the Cost Report show 52.0% of Construction as Invoiced). Note: this is an observation of an atypical divergence and is not of concern unless the variances continue in future reporting.

CM004 – 44th Street Building Demolition and Fan Plant Structure; 245 Park Avenue Entrance: MTACC reports that through September 30, 2014, the EAC increased slightly to \$55.15 million from the previous \$55.12 million. The forecast Substantial Completion date has been further extended to November 14, 2014 from the previous October 15, 2014 due to delays in completing the repairs to the failed terrazzo flooring at the 245 Park Entrance and the contractor's overall slow progress. MTACC reported that Substantial Completion is contingent on completing this work. Beneficial Use for the 245 Park Avenue Entrance was achieved October 21, 2013. The actual percent complete was 99.92% versus 100% planned.

Construction Progress:

<u>Vent Plant</u>: The Vent Building erection is complete for the scope of this contract. Punchlist work is nearing completion. The CM005 contractor has taken over the MPT on E. 44th St. and has installed a hollow metal security door to the site.

<u>245 Park Ave. Entrance</u>: Portions of the failed terrazzo floor in the passageway continue to be an issue. As the entrance is being used by the public, this repair work must be done at night and weekends. The PMOC forecasts that completion of this work will extend to the end of 2014.

CM005- Manhattan South Structures: The Estimate at Completion for CM005 increased to \$212,546,895 from \$210,923,395 during September 2014 due to new modifications that were added to the contract. The MTACC forecast for Substantial Completion remained at February 6, 2016. Actual construction progress for 3Q2014 was 15.6% versus 14.1% planned. Cumulative progress was 51.6% actual versus 50.0% planned.

Construction Progress: During October 2014, the CM005 Contractor completed the first lift concrete pours of the perimeters of the 38th St. vent facility and the GCT 1&2 West Wye Cavern, began the invert concrete pour of the East Fan Chamber and completed the archway concrete pour in the West Fan Chamber at 38th St., installed waterproofing in the westbound Tail Track T404, continued water stop installation in the Westbound Cavern, continued intermediate level and interior wall construction in the GCT 1&2 East Wye Cavern, began interior wall construction in the GCT 1&2 West Wye Cavern, and completed pneumatically applied concrete (PAC) application of the archway at the bottom of Escalator Way #3.

CM006 – Manhattan North Structures: The Estimate at Completion for CM006 increased from \$295,345,750 to \$317,595,750 during September 2014 due to a contract modification for construction of the GCT Cavern North back of house facilities that were added to the contract. The MTACC forecast for Substantial Completion remained at November 30, 2016. The MTACC still has not generated a progress curve for CM006 because the contractor's baseline schedule has not been approved. As a result, no current or cumulative construction progress is available.

<u>Construction Progress</u>: During October 2014, the CM006 Contractor completed the concrete sidewall pours in the GCT 4 West Wye Cavern, completed waterproofing installation in the GCT 4 Crossover Central Instrument Rooms, continued smoothing shotcrete application of the GCT 5 West Wye archway, and began to install perimeter sidewall re-bar in the plenum caverns of the 50th and 55th St. vent facilities.

CM013A – **55th Street Vent Facility:** MTACC reports that through September 30, 2014 the EAC has increased slightly to \$57.24 million from the previous \$57.23 million. Forecast Substantial Completion remains April 5, 2015.

<u>Construction Progress</u>: Milestone #1, completion of the Facility Power and Traction Power Levels (lower cavern) for turnover to Contract CS179 was completed during October 2014 as scheduled.

<u>Plenum</u>: Concrete lining of the east & west walls is ongoing. Concrete placement of the Plenum Roof has begun.

<u>Cavern</u>: Welding and erection of the permanent precast stairs is underway with precast deliveries ongoing. Completion of the Milestone #1 punchlist items is continuing.

Floor and wall placement has reached the Upper Fan Level and the initial shotcreting of the Cavern Arch Ceiling Lining is underway, to be followed by the installation of waterproofing.

CM014A– Concourse and Facilities Fit-Out: MTACC reports that through September 30, 2014, the EAC remains \$55.80 million. MTACC Forecast Substantial Completion date continues to be March 31, 2015. As of September 30, 2014, MTACC reported that the actual percent complete was 81.30% vs 92.69% planned. This spread continues to be due to a lack of manpower and the Contractor's slow progress in executing the work, and the resultant delay impacts to the forecast for when Con Ed will energize the system for final testing and commissioning.

Construction Progress:

Concourse (Original Contract): Surveying and layout is ongoing. Installation of fire stopping continues and CMU wall erection and painting is ongoing. Installation of vertical conduit in Shaft #2 is continuing. Ductwork and piping installation continues in Zones #1 & #2. Sprinkler and fire standpipe installation continues. Branch feeder and conduit installation is ongoing throughout. Installation of the 16341 switchgear is nearing completion. Installation of the 600V cable continues. The pulling of permanent MV cable (for ConEd) from the Garage to the new Concourse is complete.

CM014-B Scope Transfer Work

The ramp work has been removed from this contract and placed back in the CM014-B contract due to significant utility interference at the base of the new Dinning Concourse Ramp that must be relocated by MNR.

CS179 – **Systems Package 1:** MTACC awarded this contract in March 2014. As of September 2014, the Estimate at Completion for CS179 is \$550,388,000. The MTACC forecast for Substantial Completion is November 25, 2019.

Construction Progress: Problems continue with producing a viable schedule for this Contract. The initial schedule submittal containing approximately 8,000 activities has now grown to between 20-25,000 activities in the next schedule iteration. During this increase in activities, the Contractor uncovered a flaw in its original schedule logic that caused it to seek relief from the schedule submittal requirement. The ESA CM's Office sent a letter to the Contractor requesting that they deliver a viable schedule. The Contractor is in the mobilization stage of the Contract and actual construction will not begin until 2015.

Queens Contracts:

CQ032 – **Plaza Substation and Queens Structures:** The Estimate at Completion for CQ032 increased slightly from \$236,677,769 to \$237,347,769 due to modifications added to the contract. The MTACC forecast for Substantial Completion was extended to April 1, 2016, an increase of 1 month. Actual construction progress for 3Q2014 was 9.7% versus 5.5% planned. Cumulative progress was 69.0% actual versus 67.1% planned.

<u>Construction Progress</u>: On October 30, 2014, a sub-contractor for the CQ032 Contractor was involved in an incident while it was drilling a well point to de-water an area for the expansion of the 23rd St. vent facility in Queens. The sub-contractor's rig drilled a hole through the roof of the NYCT 41st Avenue tunnel (which the ESA project shares with the NYCTA) and the drill bit came in contact with a revenue "F" train shortly after it had left the 21st St. station. No serious injuries were reported although the drill bit caused minor damage to several train cars. The NYCT reported that approximately 800 people were evacuated from the train that struck the drill bit. MTACC continues to investigate the root cause of this incident.

During October 2014, the CQ032 contractor continued to place steel and concrete for C06 and C07 levels of Plaza Substation in the Q-Tip and continued construction of interior walls for the equipment rooms on the C06 level, began excavation for the Yard Services Building adjacent to the Open Cut, continued Stage 2 steel erection in the Early Access Chamber, completed the first phase of 63rd St. Tunnel extension into the Bellmouth, and continued bench wall repairs in the 63rd St. Tunnel itself.

Harold Interlocking:

CH053 Contract – Harold Structures Part 1 and G.0.2 Substation: The Estimate at Completion for CH053 was reduced slightly during September 2014 from \$298,804,003 to \$298,624,003 due to reforecast of existing contract modifications. The MTACC forecast for Substantial Completion was extended an additional 3 weeks to May 4, 2015. Actual construction progress for 3Q2014 was 1.3% versus 4.3% planned. Cumulative progress was 91.6% actual versus 99.8% planned.

<u>Construction Progress</u>: During October 2014, the CH053 contractor installed signal power separation poles 29C, 29D, and 29E, graded the access road on both sides of the west end of Harold Access Bridge, continued construction of the Tunnel A Emergency Exit, placed stone riprap on the north embankment of the 39^{th} St. Bridge, and continued to install conduit and grout micro-tunnel Run #s 1-4 at G02 Substation.

CH054A – **Harold Structures Part 2A:** The Estimate at Completion for CH054A remained at \$61,384,271 during September 2014. The MTACC forecast for Substantial Completion was extended by approximately 2 months to April 10, 2015. Actual construction progress for 3Q2014 was 3.7% versus 5.9% planned. Cumulative progress was 86.6% actual versus 100.0% planned.

<u>Construction Progress</u>: During October 2014, the CH054A contractor began the sewer microtunnel bore along Loop 1 Track in "F" Interlocking and continued to install, splice, and test 12kV cable between "F" and Sub 44 in Harold Interlocking.

CH057A – Part 3 Westbound Bypass: The Estimate at Completion for CH057A remained at \$105,373,688 during September 2014. The MTACC forecast for Substantial Completion was

extended by 7 weeks from May 19, 2016 to July 11, 2016. Actual construction progress for 3Q2014 was 11.2% versus 20.4% planned. Cumulative progress was 11.2% actual versus 20.4% planned.

<u>Construction Progress</u>: During October 2014, the CH057A contractor began installation of soldier piles at the west approach of the Westbound Bypass Structure in "F" Interlocking, but was hampered by frequent break-downs of its "Casa Grande" drilling rig.

CH057B – **Harold Track work Part 1:** The CH057B contractor completed all its ESA construction in August 2014 and has since left the project.

CH057C – **Harold Track work Part 2:** The Estimate at Completion for CH057C remained at \$1,910,000 during September 2014. The MTACC forecast for Substantial Completion remained at January 22, 2016. Actual construction progress for 3Q2014was 29.5% versus 52.9% planned. Cumulative progress was 29.5% actual versus 52.9% planned.

<u>Construction Progress</u>: The CH057C completed demolition of the retaining wall between LIRR PW2 (Port Washington #2) and old ML2 (Main Line #2) tracks at 48th St. in Harold Interlocking during early September and installed sub-grade material along the roadbed of old ML2 for future installation of track and turnouts.

Railroad Force Account:

FHA01 – Harold Stage 1 Amtrak: The Estimate at Completion for FHA01 remained at \$18,824,861 during September 2014. The MTACC forecast for Substantial Completion was extended by 5 weeks to May 27, 2016. Actual construction progress for 3Q2014was 0.5% versus 1.6% planned. Cumulative progress was 97.3% actual versus 98.4% planned.

<u>Construction Progress</u>: During October 2014, the Electric Traction Department continued to make limited catenary and signal wire transfers between Thomson Avenue and Sub 44.

FHA02 – Harold Stage 2 Amtrak: The Estimate at Completion for FHA02 remained at \$45,369,618 during September 2014. The MTACC forecast for Substantial Completion was reduced by a year to November 14, 2017. Actual construction progress for 3Q2014was 5.5% versus 6.2% planned. Cumulative progress was 88.5% actual versus 89.2% planned.

<u>Construction Progress</u>: During October 2014, Amtrak Track personnel reconstructed approximately 600 LF of Loop 1 Track which is ultimately planned to become part of Loop 1A Track when it is constructed in the future.

FHA03 – **Harold Stage 3 Amtrak:** The first phase of FHA03 was completed in August 2013 and has since been de-activated until additional work is added to the scope. The PMOC will eliminate this section in its monthly report until additional work is added to the scope.

FQA65 – Loop Interlocking Amtrak: The Estimate at Completion for FQA65 remained at \$29,663,652 during September 2014. The MTACC forecast for Substantial Completion remained at September 22, 2019. Actual construction progress for 3Q2014was 2.4% versus 5.9% planned. Cumulative progress was 6.3% actual versus 10.1% planned.

<u>Construction Progress</u>: Amtrak C&S personnel continued to install signal trough and conduit between Q Tower and the future "T" Interlocking and continued construction of a retaining wall along Loop 2 Track during October 2014.

FHL01 – Harold Stage 1 LIRR: The Estimate at Completion for FHL01 remained at \$20,804,621 during September 2014. The MTACC forecast for Substantial Completion remained at September 17, 2015. Actual construction progress for 3Q2014was 8.3% versus 5.4% planned. Cumulative progress was 98.7% actual versus 93.1% planned.

<u>Construction Progress</u>: During October 2014, LIRR Communications personnel continued to install pole line and cable between Location 30 at Woodside Interlocking and 43rd St. in Harold Interlocking while Electric Traction personnel continued to install 3rd rail apparatus for the ML2 and ML4 Track realignments.

FHL02 – Harold Stage 2 LIRR: The Estimate at Completion for FHL02 remained at \$76,619,172 during September 2014. The MTACC forecast for Substantial Completion remained at April 2, 2018. Actual construction progress for 3Q2014was 16.9% versus 16.9% planned. Cumulative progress was 58.0% actual versus 61.7% planned.

<u>Construction Progress</u>: During October 2014, LIRR personnel installed the #3234E and #6167W (with movable point frog section) turnouts and began installation of the #6176E turnout in Harold Interlocking. LIRR Signal personnel continued to install conduits, pull cables, and test circuits for the "H4" CIL cutover in Harold.

FHL03 – **Harold Stage 3 LIRR:** The first phase of FHL03 was completed in September 2013 and it has since been de-activated until additional work is added to the scope. The PMOC will eliminate this section in its monthly report until additional work is added to the scope.

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

ESA Project Quality Manual (PQM): The PMOC suggestions were incorporated into Revision 7 to the Project Quality Manual. The PQM was signed off by ESA and MTACC Executive Management and issued.

As-Built Process Audit: Most contractors had been deficient in submitting their as-builts on time and in the proper format. The ESA Quality Manager conducted an As-Built Process Audit on the Contractors for the following Contracts: CH053, CH054A, CQ032, CM004, CM014A, CM005, CM013, and CM013A. Each Contractor was rated in eighteen categories including As-Built Logs, Redline Hard Copies, As-Built Submittals, As-Built Certifications, CAD Drawings, and Survey Data Backup. The CM004 and CM014A contracts received a final rating of Fail. The same contractor is responsible for both of these contracts. The CM013A contractor received a final rating of Pass. The remaining contracts were rated as Need Improvement. Contractors for contracts CH057A, CS179, and CM006 will be audited by the end of 2014.

CS179 (**Systems Package 1 – Base Contract**): The CS179 Contractor was not meeting its Quality requirements. They have replaced their Quality Manager and are beginning to take appropriate action. They have resubmitted their Inspection & Test Plan, have begun quality training, are current on their inspection daily reports, and have added hold points on their sixweek look-ahead schedule. They must still designate a Systems Quality person, revise their organization chart, and submit a resume for their new Quality Manager to ESA for approval.

Procedure Compliance Audits: During 3Q2014, MTACC Quality conducted Procedure Compliance Audits on Contracts CM005, CM013, CM013A, CH057A, and CQ032. The major finding in most of the audits was that the field engineers require training in completing the daily construction reports. The auditors also recommended that columns be added to some of the logs

that are prepared. Since there were similar findings and recommendations for all contracts, the ESA Heavy Civil Project Executive has prepared a response to the auditors. MTACC Quality agreed with most of the response but asked for a clarification on one item.

Quality Training: In October 2014, the ESA Quality Manager conducted workshops/training on close-out procedures to contractors on the new ESA contracts and on some of the existing contracts. Training on close-out procedures, as well as on nonconformance reports and as-builts, will continue in November 2014.

Quarterly Quality Oversight Checklists: The ESA quality auditors use a generic checklist when performing their Quarterly Quality Oversights (QQO). The Contractors' Quality Plans that were approved by ESA often contained additional requirements. The PMOC recommended to MTACC Quality Management that each element in the QQO checklist be tailored to include these additional requirements. MTACC Quality agreed and the revised checklist now includes blocks for additional requirements from the Quality Plan of the contractor being audited. In addition, many redundant questions were eliminated from the initial checklist. Training for the ESA Quality staff on the revised checklist will be given in November 2014 and the PMOC will be invited to attend.

2.0 SCHEDULE DATA

ESA submitted its IPS #62 data date October 01, 2014 and its variance report. The variance report states that "The current working IPS reflects an early Revenue Service Date (RSD) of March 25, 2020, a target RSD of February 12, 2021 inclusive of 324 days of IST contingency and a new late RSD of December 13, 2022 inclusive of 324 days of IST contingency and 669 days of program-level contingency."

Table 2-1 below shows the longest path contingency and milestones from IPS#62 data date October 01, 2014. It is evident in the table below that ESA does not have a critical path ending to March 25, 2020 that it claims is its early RSD. The table also shows the ESA logic of early finish; however, this logic is questionable since the date that ESA is referring to "completion of Construction (Construction & IST)" is substantial completion of Contract CS179 and not the final completion that happens on March 5, 2020.

Activity Description	Γ	Ouration Start	Finish
Completion of Construction (Construction & IST)			11-26-2019
LIRR Planning Ready for LIRR/ Training	30	11-27-2019	12-26-2019
LIRR Burn-in	90	12-27-2019	03-25-2020
Revenue Service D	ate 03-25-20)20	

Table 2-1: Early Finish

The clarification between definition of substantial completion and contingency is a very important issue in ESA and specifically in Contract CS179

The table below shows ESA's target RSD of February 12, 2021 and that there are 324 days of contingency.

Activity Description	Duration	Start	Finish
Completion of Construction (Construction & IST)			11-26-2019
ESA Contingency @ Completion of IST (IST Completion Contingency to LIRR)	170	11-27-2019	05-14-2020
Stakeholder Agreed IST Contingency	154	05-15-2020	10-15-2020
LIRR Planning Ready for LIRR/ Training	31	10-15-2020	11-14-2020
LIRR Burn-in	90	11-15-2020	02-12-2021

In addition, ESA has produced the following table to show the contingencies in its late finish date of December 13, 2022 with total of 993 days of contingencies.

Activity Description	Duration	Start	Finish
Completion of Construction (Construction & IST) 11-26-2019			
ESA Contingency @ Completion of IST (IST Completion Contingency to LIRR)	170	11-27-2019	05-14-2020
Stakeholder Agreed IST Contingency	154	05-15-2020	10-15-2020
ESA Program Schedule Contingency	365	10-16-2020	10-15-2021
Stakeholder Agreed Additional Program Contingency	304	10-16-2021	08-15-2022
LIRR Planning Ready for LIRR/ Training	31	08-16-2022	09-14-2022
LIRR Burn-in	90	09-15-2022	12-13-2022

The most important 90 day look-ahead milestones for the project at this point is CM007 advertisement date which was scheduled for October 1, 2014 in Update#59 and November 18, 2014 in the current update; however ESA has already stated that it will not be ready to advertise until early 2015, raising a serious question as to how the PMT manages its IPS, and what is the level of accuracy in its schedule reporting.

Table 2-2: Critical Milestones 90 Day Look Ahead

A address ID	IPS-	A -4::4 No	Original	C404	Finish	Total
Activity ID	CONTRACT	Activity Name	Duration	Start	rinisn	Float
				18-Nov-		
CM007-1620	CM007	CM007 Advertise	0	14		45
		CH053 Complete				
		Grading East of 43rd				
		Street (Northside)				
FHL01-1100	FHL01	(WBY)	0		5-Dec-14	37
		CH053 Complete				
		Grading (Northside)				
		(Track A Approach				
FHL01-1110	FHL01	Structure)	0		5-Dec-14	57
		FHL01 - Cutover 821/				
FHL02.SI.00175	FHL02	823 Crossover	0		14-Dec-14	100

Project Critical Path: As of October 1, 2014, the East Side Access Program Critical Path begins with work that is currently being performed under CM005 Manhattan South Structures (specifically the GCT 1 & 2 structure), followed by CM007 building the structure within the GCT Caverns (specifically, the nodes), then cavern structures and fit out, and ends with CS179 Integrated System Testing

In October 2014, ESA stated that Harold has experienced serious delays since March of 2014 because of:

- Amtrak Resources actually provided have been significantly below planned levels
- Original sequence of cutovers (new routs/interlocking) provide limit flexibilities in making changes
- Issuance of circuit revisions by LIRR has lagged
- Civil Speed Enforcement

Additionally ESA has made the following Major Changes in the IPS since August of 2014:

- Means & Method changes for Track A Approach structure
 - o Reason: Delay of 12KV duct bank
 - o Scope Deletion Delete the roof construction in CH057A contract
 - o CH061A contract is added in Harold program to perform the following work:
 - ➤ A Approach structure transferred from CH057A and CH058
 - ➤ D approach structure (east End) transferred from CH058
- Year 2015 outage plan is revised due to the delay of 12KV duct bank (C feeder), H5/H6/Loc. 30 cutover; and the difficulty of screenshot revision to cutover 6156 crossover.

Furthermore, ESA has made some changes in its Harold schedule for the issue of "Civil Speed Enforcement." The followings are major changes:

■ The cutover of screenshot 4D (Operate B/C) is slipped by 16 months (April 22, 2018 to August 30, 2019)

- In baseline IPS data date July 1, 2014, Harold longest path was driven by ET direct work Harold completion date has slipped by 5 months from April 23, 2019 to September 22, 2019.
- The NTP dates of Harold 3rd party contractors are revised due to following reasons:
 - The delay of current active project is impacting the access and protections which are required by following contracts.
 - Due to the delay of CIL cutovers, there is more float time for D pit and approach structure and 48th Street bridge (CH057 scope)
 - The East Bound Re-route (EBRR) outage is advanced to 2017 from 2016. The NTP date of CH058 Contract is determined by the EBRR outage.

Table 2-3 below shows that, assuming all above statements are accurate and there won't be any more delays from now until the end of the Harold substantial completion, there would be only 20 days of float remaining for system IST path coming from Harold.

Table 2-3: Harold Critical Path to IST

Activity ID			Original	Start	Finish	Total
	CONTR ACT		Duratio			Float
FHL04-2330	FHL04	Harold Complete Turnover to System Service	n		30-Jun-19*	0
CS179-1530	CS179	Signals IST - Contractor (TOC)			30-Jul-19	19
HAROLDSC10TO		ALL HAROLD COMPLETE - TURNOVER TO CS179 FOR IST		1-Jul-19	1-Jul-19	25
CS179-1540	CS179	Signals IST - LIRR (TOC)	21	31-Jul-19	28-Aug-19	19
CS179-1690	CS179	Traction Power IST (JAM)	35	29-Aug-19	16-Oct-19	19
CS179-1680	CS179	Communication - Train Radio (All Track work Installed) (TOC)	10	17-Oct-19	30-Oct-19	19
CS179-1470	CS179	(CS179 MS 13) CS179 Substantial Completion w/ Integrated System Testing Completion	0		26-Nov-19*	0

Schedule Contingency: IPS#62 is based on RSD of December 2022, and has multiple levels of contingency. It is not clear what controls the PMT or MTACC has over these contingencies. Additionally, ESA should develop its schedule contingency drawdown plan as required in the ELPEP agreement.

3.0 COST DATA

Funding: The MTA funding request for the 2015-2019 Capital Program was submitted to the NYS Capital Program Review Board (CPRB) in September 2014. ESA will need to obtain funding from this Program to award all the options in the CS179, CM007, CQ033, and CH058 Contracts. The new \$10.178B (not including the \$463 Rolling Stock Reserve) budget presented to CPOC in June 2014 will make the need for additional funding even greater. The CPOC figure represented an increase of \$484M from the Re-Plan Budget presented in January 2014, and is \$1,932M greater than the 2012 Re-baseline Budget. In addition, the 2012 re-baseline budget had included more than \$700M of un-funded scope that was to be addressed in the 2015-2019 MTA Capital Program. Until new funding is provided, the un-funded scope rises to \$2.6B.

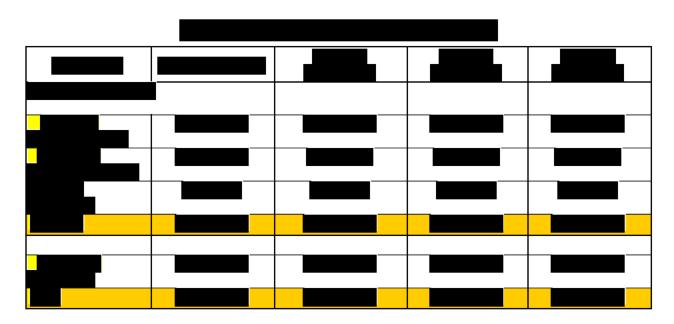
Budget/Cost: The ESA September 2014 Progress Report shows the total project progress was 52.0% vs. 52.7% planned against the Current Baseline Budget (CBB) of \$10,178M, and the construction progress as 51.3% vs. 52.0% planned, based on invoiced amount (details of project budget and expenditures are shown in Tables 2 and 3 in the appendix). Over the last month, the actual total project progress remained unchanged, while planned progress increased by 0.4%.

ESA had been reporting against that budget with a series of small contingencies on varying areas of possible cost. The current \$10.178B budget follows that same procedure of assigning a series of separate small contingencies which are not easily distinguishable. This may entail an excess number of budget adjustments in the future, which appears to be operationally complex.

Although the PMOC was informed by ESA that it had reassigned values to each of the SCCs as part of their re-plan, they have not yet completed that realignment or demonstrated to the PMOC how the values are to be determined or that the structural problems in the SCC had been addressed. Whereas SCC breakdowns are assigned to scope transfers, the overall budget management process does not track or control the cost allocation of Contracts by SCC. The previous SCC breakdown for the \$9,693 million budget still had several contract packages assigned to incorrect SCCs, as well as the inclusion of contract packages that no longer exist. ESA has now provided a SCC breakdown for the \$10.178B budget to replace the previous summarized breakdown. The PMOC had recommended that ESA re-evaluate its SCC structure and cost allocations going forward as part of its re-planning effort, and establish a coherent and consistent SCC management program.



As part of the re-plan, ESA has begun use of an 'Allowed for MODs' category, which represents funds moved out of Contingency equal to the value of the Pending and Potential MODs. Funds for potential MODs that are not realized are then moved back into Contingency. The PMOC believes that this method of tracking will make it difficult for the ESA Project Control Group to accurately track remaining contingency at any given point in time, in addition to a very high level of continual movement of funds between statuses.





Change Orders/Budget Adjustments: The PMT reported that over the last quarter, nineteen (19) change orders over \$100K were executed, of which ten (10) were to the GEC, with a net value of approximately \$78.9M. That included a single MOD to CH053 in July 2014 for \$55.2M for a Revised Contract Schedule. The PMOC is not included in or privy to any of the MOD reviews or settlements, so the elements of that MOD agreement were not reviewed by the PMOC. During the last month there were two (2) Construction MODs totaling \$8.4M and two (2) GEC MODs totaling \$379K.

4.0 RISK MANAGEMENT

ESA had resumed its monthly risk meetings and has submitted an updated risk register however a risk meeting was not held during the month of October 2014.

MTACC intends to perform a package level risk assessment for CM007 once the design is finalized. Conducting the CM007 Risk Assessment before the RFP is advertised is even more critical in the PMOC's opinion, given the fact that ESA did not conduct an adequate constructability review for this package as called for in its management plans. Although CM007 is at 100% design, a risk workshop has not been scheduled as of the end of October 2014.

An ESA review of the risks at Harold indicate that most of the major risks identified in the Harold/Queens risk workshop have already been realized since the initial Harold Re-planning effort was completed in February 2014. Impact of these risks on the overall ESA Program schedule will have to be evaluated after ESA incorporates the latest Harold schedule into the Program schedule in November 2014.

ESA forecasted that it would recommend an award of the CM014B Package at the November 2014 MTA Board Meeting. Additionally, it is the PMOC's understanding that the CM007 Package will not be advertised until next year (plan was to advertise in November 2014).

5.0 ELPEP COMPLIANCE SUMMARY

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

- Technical Capacity and Capability (TCC): The FTA requested MTACC to update its TCC Plan in response to the FTA/PMOC comments that were generated in November 2013 as a result of significant changes in key ESA upper management level positions. At the October 2, 2014, ELPEP Quarterly Review Meeting, MTACC stated that the TCC Plan revisions are not yet completed pending finalization of the role, responsibilities and level of authority of the ESA Change Control Committee. As of October 31, 2014, the revised TCC Plan has not been submitted.
- Continuing ELPEP Compliance: The following ELPEP components continue to need improvement or are deficient: Management Decision; Design Development; Change Control Committee (CCC) Process and Results; Stakeholder Management; Issues Management; Procurement; Timely Decision Making; Risk-Informed Decision Making.
- Project Management Plan: MTACC submitted PMP Rev. 10 to the FTA and PMOC on July 18, 2014. This revision incorporates changes stemming from FTA/PMOC comments on PMP Rev (9.0) provided in December 2013 as well as changes that resulted from the MTACC's Candidate Revision process. Based on working meetings, dialogue and additional clarifying review comments from the PMOC, MTACC made additional changes to the PMP and submitted an updated Rev. 10 on September 18, 2014. The current PMP Rev. 10 is under final review by the PMOC.

The PMOC notes that since June 2013, the ESA project has continued to be non-compliant with ELPEP, and is not meeting some of the more important requirements of the SMP and CMP subplans to the PMP. The PMOC's opinion is that this is a serious deficiency and needs to be resolved immediately. The PMOC's major areas of concern include:

- Cost/Schedule Contingency: ESA has not calculated the cost and schedule contingency utilization curves for the new baseline budget and schedule presented to CPOC in June 2014. Given that the new budget and schedule have been put in place, the PMOC expects that MTACC will meet the ELPEP requirements for cost/schedule contingency drawdowns in the next quarterly reporting period, the 4Q2014.
- Schedule Management Plan (SMP): The ESA project remains non-compliant with requirements for IPS Updating, Forecasting, and Schedule Contingency Management against a current baseline schedule. Given that the new budget and schedule have been put in place, the PMOC had expected that MTACC would start to meet the requirements set forth in its SMP in the above referenced areas. This has not occurred as MTACC is currently reworking the entire Harold Interlocking part of the IPS.
- Cost Management Plan (CMP): The ESA project remains non-compliant with requirements for Project Level EAC Forecasting, Project Level EAC Forecast Validation,

and MTACC Cost Contingency Management and Secondary Mitigation. Given that the new budget and schedule were presented to the MTA CPOC in June 2014, the PMOC expects that MTACC would have started meeting the requirements set forth in its CMP in the above referenced areas.

Revisions to the ELPEP Document: Although the 2014 Re-Plan budget number and Revenue Service Date were presented to CPOC on June 23, 2014, MTACC has not yet fully incorporated the schedule details into its regular monthly reporting. MTACC had committed to providing these details by about August 25, 2014. As of October 31, 2014, however, MTACC has not provided the complete schedule data that is the basis for the RSD presented to CPOC. MTACC has taken the position that the IPS will not be finalized and presented until the current Harold Interlocking re-planning effort has been completed and to not expect a revision until December 2014. The PMOC notes that this current Harold re-plan will supersede the earlier Harold Re-Plan that began in 4Q2013 and was completed in 1Q2014. Revisions to the ELPEP Document cannot be completed until the IPS is finalized.

The ELPEP Quarterly Review Meeting was held on October 2, 2014. The following is a summary of the significant points discussed:

- The revision of the TCC Plan. (see discussion above)
- The current Harold Interlocking re-plan results will be included in the November 2014 IPS (issued in December 2014).
- CM007 risk workshop is anticipated in November 2014 and may need to be refreshed in 2015.
- Draft cost and schedule contingency drawdown curves are expected to be available in 2-3 months, by year's end.
- The revision of the PMP. (see discussion above)
- After completion of the comment resolution process for the PMP, MTACC will review three key Sub-Plans in this order: first, ESA/SAS Cost Management Plan; second, ESA Schedule Management Plan; third, ESA Risk Management Plan.

The next ELPEP Quarterly Review Meeting with MTACC, FTA-RII, SAS and ESA projects and the PMOC has been scheduled for December 11, 2014.

MTACC Project Procedures Audit Related to ELPEP: MTACC Quality audited ESA for compliance with ESA Project Procedures. There were 11 findings. The PMOC has requested a copy of each finding, the proposed corrective action plan, and documentation that verified all corrective actions had been implemented.

MTACC Procedure Compliance Audits: MTACC Quality conducted Procedure Compliance Audits on the following five contracts during the third quarter of 2014: CM005, CM013, CM013A, CH057A, and CQ032. The major finding in most of the audits was that the field engineers require training in completing the daily construction reports. The auditors also recommended that additional columns be added to some of the logs that are prepared. Since there were similar findings and recommendations for all contracts, the ESA Heavy Civil Project Executive has prepared a response to the auditors. MTACC Quality agreed with most of the response but asked for a clarification on one item.

6.0 SAFETY AND SECURITY

Project safety statistics for lost time accidents on active construction contracts continue to trend above the Bureau of Labor Statistics (BLS) national average at 2.26 vs. 1.70 lost time accidents (LTA) per 200,000 hours. This is slightly higher than last reporting period (2.20). The CM005 Contract has an average of 4.02 LTA, trending higher than the project average and decreasing slightly since the last reporting period (a nearly twice the overall Project rate). The Contractor has committed to actions to improve safety awareness among its supervisors and crews and is taking steps to improve the safety on site including: daily toolbox talks with crews where safe work plans for the work activity to be performed will be discussed; daily operations meetings to discuss and coordinate the planned work activities will be held; construction debris will be collected in an organized fashion and properly bagged and/or bundled for efficient removal; clear walking paths to all work areas will be provided and access/egress to the underground work area will be maintained at all times.

On October 30, 2014, a serious safety-related incident occurred on the CQ032 Contract and is discussed in that section of the report.

The PMT did not report any significant security issues in its September 2014 Monthly Progress Report.

7.0 ISSUES AND RECOMMENDATIONS

<u>Design</u>: The PMOC remains concerned that the GEC and PMT continue to consistently miss target dates for remaining design activities on the project. In the PMOC's opinion, the continuing re-packaging and shifting of scope place a strain on available GEC resources. Rescoping continues with the latest round of shifts including: transfer of CM007 lower cavern walls into CM005; transfer of scope from CM012A into CM007; development of a CHO61A package; and inclusion of scope from FQA65 into the CH057 package. The PMOC continues to recommend that the PMT develop a tracking sheet with firm dates for interim activities (e.g. meetings; stakeholder approvals) as a tool to augment the design management process.

Procurement: The lack of stability in the contracting strategy and Contract Packaging Plan remains a concern. The PMT continues to shift and split scope among different packages, which makes it difficult to fully understand the impact of these changes to the overall ESA Project. An updated draft Contract Packaging Plan (revision 10.0) was submitted on March 28, 2014, after which there were significant scope moves since the plan was issued. The PMOC believes that ESA should adhere to the current CPP and minimize any further scope shifts. The latest shifts under consideration include moving the scope of CM012A (Bellmouth) into CQ032 and CM007 (since CQ032 contractor is already in the Bellmouth area and shifting some of this work to the CM007 package will allow that contractor access); and moving scope from CH053 into the new CH061A (Harold Structures-Tunnel A) (to mitigate some of the delay in CH053). These continuing moves represent an ad hoc approach to risk mitigation, and, in the case of the shift into CM007, will require yet another change to a large, unawarded Contract package, which may further complicate the procurement.

<u>Contract CM014A</u>: The PMOC continues to recommend that MNR prioritize removal/relocation of the obstructing utilities to the new ramp, stairs and escalator in the Dining Concourse access to the Main Concourse area. During the last few months, the MTACC PMT has advised the PMOC that this work was being scheduled with the intent of having it completed

prior to the award of the CM014-B contract. The PMOC remains concerned that, as of the date of this report, there is no evidence that this work has begun.

<u>Contract CS179</u>: The PMOC believes that the inability to produce an acceptable schedule seven months into the Contract is a problem and concern. The CS179 Contract has numerous interfaces and access restraints that must be accurately characterized in the project baseline schedule. In addition, the CS179 Contractor is not meeting its Quality requirements as described in the Quality section of this report.

Contracts CH053/54A: The PMOC remains concerned that the CH053/CH054A Contracts continue to have delays, with a potential for additional construction delays and increased cost due to their high degree of dependence upon the railroads' Force Account support, which has been historically inconsistent. Although the Contractor continues to progress its construction as rapidly as possible, important tasks continue to be postponed due to lack of proper Force Account protection. The ESA PMT is responsible for allocating a fixed amount of railroad personnel to the various Contracts, but continues to place lower priority on CH053/CH054A tasks than for other Harold work. To avoid further schedule slippage, the PMOC recommends that the ESA PMT place a greater priority on the CH053/CH054A work tasks.

Contract CH057A: The PMOC is concerned that the CH057A contractor is dependent upon railroad Force Account support in the same manner that the CH053/CH054A contractor is. As a result, CH057A progress has been negatively affected because all three contracts must use the same limited Force Account personnel (which the MTACC is responsible to allocate). The PMOC believes that MTACC should have applied "lessons learned" from previous contracts CQ031 and CQ039 and waited until CH053 and CH054A were much closer to actual Substantial Completion before advertising CH057. The PMOC recommends that the MTACC do everything possible to expedite SC for contracts CH053 and CH054A so that CH057A has a much clearer path for the remainder of its construction.

<u>Contract CQ032</u>: The drilling incident that occurred on October 30, 2014 (discussed earlier in this report) is of major concern. MTA/MTACC needs to complete its investigation and root cause analysis of the incident as soon as possible and put appropriate measures in place to ensure that this type of incident does not happen again in the future.

Project Funding/Budget: As stated in the Risk Management Section, the PMOC believes that the timing and availability of funding presents a significant schedule risk to the project. The timing of funding has impacted the CS179 package (restructured with options due to funding availability) and the CM007 procurement (moved out to 2015 with limited NTP and 2016 with full NTP). The PMOC has recommended to the ESA Project Controls Group that a cash flow projection be developed along with a funding availability projection to assess the risks to the project should funding not be available in the necessary time frame; only the cash flow has been provided.

The PMOC is also concerned about the amount of time it is taking to develop and implement its new cost reporting system (Unifier). This effort began over one year ago and, as of the end of September 2014, ESA still has a considerable way to go to have a fully functional system that will be useful as a project controls tool. The PMOC recommended at the July 2014 cost review meeting that the Project Controls Group develop a set of target interim milestones for completing

the system. However, at the September 2014 meeting, no progress had been demonstrated and no timetable for roll out of modules or any schema for data sources for reporting was available.

<u>Project Schedule:</u> One of the major concerns about the revised baseline schedule presented to the MTA CPOC in June 2014 is that ESA has been unable to produce/provide a basis of schedule for its new baseline, despite several requests from the PMOC at the monthly schedule review meeting. As mentioned above, the PMOC is also concerned about the inability of the CS179 Contractor to produce a viable schedule. This is a key remaining Contract and is one of the most complex. The PMOC remains concerned about the latest Harold Re-planning and its potential impact on the Program schedule. ESA has committed to inserting the latest Harold schedule data into the IPS in November 2014.

Risk Management: The PMOC is concerned about the schedule risk entailed in the delays in the CM014B and CM007 procurements. ESA forecasted presenting a recommendation to award the CM014B Package at the November 2014 MTA Board Meeting. It is the PMOC's understanding that the CM007 Package will not be advertised until next year (plan was to advertise in November 2014). Both of these packages are on the project near critical and critical paths.

An ESA review of the risks at Harold indicate that most of the major risks identified in the Harold/Queens risk workshop have already been realized since the initial Harold Re-planning effort was completed in February 2014. Impact of these risks on the overall ESA Program schedule will have to be evaluated after ESA incorporates the latest Harold schedule into the Program schedule in November 2014.

The PMOC continues to recommend that MTACC and ESA utilize the results obtained from the Manhattan/Systems and Harold Risk workshops held earlier this year to develop mitigation plans and strategies for the top schedule and cost risks identified.

APPENDIX A -- 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

CCU Code Compliance Unit

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
FRA Federal Railroad Administration
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

New York and Atlantic Railroad NYAR

NYCDEP New York City Department of Environmental Protection

New York City Department of Buildings NYCDOB

NYCT New York City Transit

NYSPTSB New York State Public Transportation Safety Board

OCO Office of Construction Oversight (MTA)

PAC Pneumatically Applied Concrete

PEP Project Execution Plan

PMOC Project Management Oversight Contractor (Urban Engineers)

PMP Project Management Plan

PMT ESA Project Management Team

Project Quality Manual **PQM**

PWE Project Working Estimate

Quality Assurance OA

RAMP Real Estate Acquisition Management Plan

Right of Way

RFP Request for Proposal

RMCP Risk Mitigation Capacity Plan

RMP Risk Management Plan **ROD** Revenue Operations Date

ROW

Revenue Service Date RSD SC **Substantial Completion** SCC Standard Cost Category

SIR Supplemental Independent Reviewer

SMP Schedule Management Plan

SSMP Safety and Security Management Plan

SSOA State Safety Oversight Agency
SSPP System Safety Program Plan

TBD To Be Determined

TBM Tunnel Boring Machine

TCC Technical Capacity and Capability

VE Value Engineering

WBS Work Breakdown Structure
WBY Westbound Bypass Tunnel

Table 1: Summary of Critical Dates

	EECA	Forecast (F) Completion, Actual (A) Start			
	FFGA	Grantee*	PMOC**		
Begin Construction	September 2001	September 2001(A)	September 2001(A)		
Construction Complete	December 2013	December 2022 (F)	September 2023(F)**		
Revenue Service	December 2013	December 2022 (F)	September 2023 (F)		

^{*} Source - Grantee forecast Revenue Operations Date per information presented to the MTA CPOC in June 2014.

Table 2: Project Budget/Cost Table (October 2014)

	FFGA			MTA's (Baseline CB	Budget	Expenditures	
	(Millions)	(% of Grand Total Cost)	Obligated	(Millions)	(% of Grand Total Cost)	(Millions)	(% of CBB)
Grand Total Cost	\$7,386	100.00%	\$4,724	\$11,214	100.00%	\$5,825.70	51.95%
Financing Cost	\$1,036	14.00%	\$617	\$1,036	9.24%	617.6	59.61%
Total Project Cost	\$6,350*	86.00%	\$4,107	\$10,178	90.76%	\$5,208.10	51.17%
Federal Share	\$2,683	36.30%	\$1,148	\$2,699	24.07%	\$1,963.90	72.76%
5309 New Starts share	\$2,632	35.60%	\$1,098	\$2,436.60	21.73%	\$1,701.90	69.85%
Non New Starts grants	\$51	0.70%	\$50	\$67	0.60%	\$66.60	99.40%
ARRA	0	0.00%	0	\$195.40	1.74%	195.4	100.00%
Local Share	\$3,667	49.60%	\$2,959	\$7,479	66.69%	\$3,244.20	43.38%

^{**}Source -Based on PMOC 2014 schedule trending analysis representing a medium degree of mitigation. The FTA has not yet formally accepted projections by the PMOC.

Table 3: Project Budget and Invoices as of September 30, 2014

Elements	Baseline Total Budget (June 2014)	Current Baseline Budget (Sept 2014)	Actual Awards (Sept 2014)	Paid to Date (Sept 2014)	Actual % Budget Invoiced
Construction	\$7,379,296,706	\$7,385,861,766	\$4,803,529,574	\$3,699,759,138	50.14%
Soft Costs Subtotal	\$2,798,474,304	\$2,791,909,244	\$1,601,529,801	\$1,508,358,012	54.03%
Engineering	\$720,615,810	\$720,615,810	\$651,281,210	\$630,338,387	87.47%
OCIP	\$282,613,620	\$282,613,620	\$187,960,159	\$174,752,914	61.83%
Project Mgmt.	\$972,168,644	\$972,168,644	\$646,399,923	\$589,197,743	60.61%
Real Estate	\$182,076,230	\$182,076,230	\$115,888,509	\$114,068,968	62.65%
Rolling Stock	\$202,000,000	\$202,000,000	\$ 0	\$ 0	0.00%
Project subtotal w/o Financing & RI	\$10,177,771,010	\$10,177,771,010	\$6,405,059,375	\$5,208,117,150	51.17%
Regional Investment Subtotal	\$758,260,953	\$758,260,953	\$225,258,824	\$68,365,391	9.02%
Construction (RI)	\$611,214,337	\$611,214,337	\$165,843,722	\$32,528,033	5.32%
Design (RI)	24,595,433	24,595,433	\$24,595,434	\$15,976,887	64.96%
OCIP (RI)	\$16,939,198	\$16,939,198	\$16,939,198	\$16,939,198	100.00%
Project Mgmt. (RI)	\$24,181,291	\$24,181,291	\$17,880,470	\$2,921,273	12.08%
Real Estate (RI)	\$ 0	\$ 0	\$ 0	\$ 0	0.00%
Rolling Stock(RI)	\$50,000,000	\$50,000,000	\$ 0	\$0	0.00%
Project Subtotal W/O Financing	\$10,936,031,963	\$10,936,031,963	\$6,630,318,199	\$5,276,482,541	60.19%
Finance Charges	\$1,036,100,000	\$1,036,100,000	\$617,607,000	\$617,607,000	59.61%
Grand Total	\$11,972,131,963	\$11,972,131,963	\$7,247,925,199	\$5,894,089,541	49.23%

Table 4: Comparison of Standard Cost Categories: FFGA vs. CBB

Standard Cost Category (SCC) No.	FFGA SCC Baseline (YOE \$) M	June, 2014 Re- Plan (YOE \$)	July 2014 SSC (YOE \$) M	Sept 2014 SSC (YOE \$) M	Sept 2014 % of Re- Plan	June '14 to Sept '14 Change \$M	CBB Variance from FFGA %
10	1,989	3,405	3,407	3,409	100.12%	4	71.39%
20	1,169	2,238	2,245	2,245	100.31%	7	92.04%
30	356	474	474	473	99.79%	-1	32.87%
40	205	611	606	606	99.18%	-5	195.61%
50	619	606	609	606	100.00%	0	-2.10%
60	165	220	220	219	99.55%	-1	32.73%
70	957	210	210	210	100.00%	0	-78.06%
80	1,184	1,975	1,975	1,975	100.00%	0	66.81%
Subtotal	6,813	10,178	10,178	10,178	100.00%	0	49.39%
100	1,036	1,036	1,036	1,036	100.00%	0	0.00%
Total Project Cost (10 – 100)	7,849	11,214	11,214	11,214	100.00%	0	42.87%

Reasons for Changes in SCC Codes:

SCC codes 10, 20, 40 and 50 changed because shifts in active contract issues (Pending, Potential and Possible) caused changes to the amount of contingency in each package. Since package contingency is prorated over the SCC codes in that package, as contingency changes, the amount attributable to each SCC code within a package changes also. SCC codes 10 and 20 were revised due to the closeout adjustment to the CM009 and CM019 budgets plus the transfer of the North Back of House from CM007 to CM006

Table 5 – ESA Core Accountability Items

Table 5 – ESA Core Accountability Items									
Project Status:		Original at FFGA		Current*		ELPEP **			
Cost	Cos	st Estimate	\$7.368B		\$1	0.178B	\$8.119B		
Schedule	RSI	D	December 31	, 2013	Dec	ember 2022	April 30, 2018		
Total Project Per	rcent	Based on Exper	nditures			51.2***			
Complete		Based on Earne	ed Value			NA			
Major Issue		Status				Comments			
Major Procurement Delays	nts	Technical propose received in Augus September 2014. continued as of the ESA will not make forecast date of Monot make its last 2014 for advertise now saying that puntil sometime in	osals for CM014B were gust and cost proposals in 4. Proposal evaluations the end of September 2014. The end of September 2014. The end of September 2014. The end of September 2014 and rear contains the critical and near contains the critical and near contains for the project. The PMT is the package won't be advertised potential schedule improcurement delays on two packages, since the critical and near contains for the project.			hedule impacts of t delays on these es, since they are on and near critical			
Project Schedule		to the MTA CPC RSD in December incorporates five within the IST por months of Progra	MTACC presented a new baseline schedule of the MTA CPOC in June 2014, with an RSD in December 2022. This schedule incorporates five months of contingency within the IST portion of the schedule and 22 months of Program level contingency.			additional five months of contingency into the IST duration in the schedule; the PMOC believes that the issues uncovered by the SIR with IST will result in the utilization of much of the Program Contingency. As such the PMOC believes that the RSD of December 2022 does not have a high probability of being met.			
Harold Re-plannii	ng	The ESA PMT is in the process of replanning the remaining work at Harold, as such, the Harold baseline schedule that formed the basis of the Program schedule presented to the CPOC in June 2014, is no longer valid.			Depending on the magnitude of the delays in the Harold work, the Harold Interlocking work may now move on to the projec critical path. ESA has committed to placing the latest Harold re-planned schedule into the project IPS in November 2014.				

^{*} Current Budget was approved by MTA CPOC in June 2014. ** 2010 Enterprise Level Project Execution Plan (ELPEP) reflecting medium level of risk mitigation, excluding financing cost of \$1,116 million *** Expenditure percentage based on dividing "ESA Paid" figure by "Current Baseline Budget" figure excluding Rolling Stock Reserve.