PMOC MONTHLY REPORT

East Side Access (MTACC-ESA) Project

Metropolitan Transportation Authority New York, New York

Report Period November 1 to November 30, 2014



PMOC Contract No. DTFT60-09-D-00007 Task Order No. 7, Project No. DC-27-5235, Work Order No. 2

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

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THIRD PARTY DISCLAIMER

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

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

REPORT FORMAT AND FOCUS

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

This report covers the project 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 October 2014, MTACC reported that the overall Engineering effort was 98.3% complete, based on Earned Value for Design Deliverables, the same as the previous two months. Their Cost Report shows 86.7% of the overall EIS & Engineering category as invoiced (a slight drop from the previous month due to an adjusted invoiced value) and 86.6% (also a slight drop) of the budgeted section titled "Design" (including Design Settlement) as having been invoiced.

The GEC continued to work on incorporating new scope associated with open Proposals for Change Orders (PCOs) into the final CM007 design documents. The PMT forecasts that signed and sealed design documents will be ready by mid-December 2014. The PMT also met with MNR and LIRR to discuss construction access and sequencing associated with the future 45th Street CPW elevators. MNR is currently reviewing the availability of additional staging for this work at the platform level.

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 now in the process of repackaging the work and a new bid advertisement date has not been determined.

CH058 is being repackaged and the bid advertisement date has not been determined. The East Bound Re-route tunnel construction method is being revised from a top down to a traditional cut and cover method. As a result, the 100% submission date is on hold. 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 October 2014, the Cost Report showed total procurement activity on the project as 64.0% complete, with \$6.510 billion in contracts awarded out of the \$10.178 billion current reported budget.

CM014B was advertised as an RFP on May 6 2014 and continues in the procurement process. Addendum #11 was issued on October 6, 2014 to clarify Contract requirements and to answer proposer questions. The top eight proposers were interviewed by the Selection and Technical Committee members on October 8-14, 2014. Addenda #12 and #13 were issued in early November 2014 for preparation of an amended cost proposal which will lead to a final ranking and determination of the top firms. Revised cost proposals were received on November 20, 2014. The top ranked proposers will be called into negotiations in early December 2014. The PMT previously forecast that recommendation for award would be ready to present to the MTA Board in November 2014, however, this did 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 1Q2015 at the earliest.

ESA has changed its procurement strategy for the CM007 Package. The previous strategy of issuing a limited NTP in July 2015, with full NTP in April 2016 was found to be in conflict with MTA procurement regulations (full funding must be in place to issue limited NTP). ESA is now moving a significant amount of scope out of the package and is planning to advertise the full package. The scope that will be moved out includes the south and north ends of the back of the house and the lower cavern work. As a result, the target advertisement date for CM007 was pushed back from November 2014 to December 2014 (although the December 2014 will not be met at this point). A meeting with the MTA Budget Group to discuss the MTACC's strategy to advertise the new package is planned for the first week in December 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 October 2014 Quarterly Progress Report that the total construction progress reached 53.1% complete vs. 52.9% planned, an increase of 1.8% versus the last report (the PMOC calculations from the Cost Report agree with the ESA percentage). It appears the

ESA percentage the previous month had been understated, as noted in the previous PMOC report.

CM004 – 44th Street Building Demolition and Fan Plant Structure; 245 Park Avenue Entrance: MTACC reports that through October 30, 2014, the EAC remains \$55.16 million. The Contract substantial completion was September 9, 2014. The ESA CM will issue a substantial completion letter retroactively. However, MTACC has previously reported that Substantial Completion is contingent on completing corrective work for the failed terrazzo flooring at the 245 Park Entrance. As of the date of this report, this work has not been completed.. The actual percent complete was 99.99% versus 100% planned.

Construction Progress:

<u>Vent Plant</u>: The CM005 contractor continues to maintain the MPT on E. 44th St. To date there is no construction access underway at this site by CM005.

CM005- Manhattan South Structures: The Estimate at Completion for CM005 increased to \$238,831,737 during October 2014 due to transfer of \$26 million of scope from future contract CM007 to CM005 for construction of the lower level main cavern sidewalls. The MTACC forecast for Substantial Completion remained at February 6, 2016. Actual construction progress for October 2014 was 6.0% versus 3.5% planned. Cumulative progress through October 31, 2014, was 53.5% actual versus 57.6% planned.

<u>Construction Progress</u>: During November 2014, the CM005 contractor completed placement of pneumatically applied concrete (PAC) at the bottoms of Escalator-Way #s 1, 2, 3, and 4 in the Westbound Cavern, continued to install exterior wall re-bar on GCT 1&2 East Wye Cavern intermediate level (second exterior wall concrete lift), began concrete placement for interior walls in the 38th St. vent facility, placed invert concrete in the East Fan tunnel, placed invert re-bar in the Air Wye at 37th St., and continued interior wall concrete placement and began concrete placement for intermediate level in the GCT 1&2 West Wye Cavern.

CM006 – Manhattan North Structures: The Estimate at Completion for CM006 remained at \$317,595,750 during October 2014. The MTACC forecast for Substantial Completion remained at November 30, 2016. The MTACC has not generated a progress schedule to date because the contractor's baseline schedule has not been approved yet. As a result, there is no monthly or cumulative construction progress data to report. However the Contractor does provide six-week look-ahead schedules on its current progress.

<u>Construction Progress</u>: During November 2014, the CM006 contractor began concrete placement of the intermediate level slab in the 50th St. vent facility, installed utility conduit, drainage pipe, and re-bar in the two Central Instrument Rooms in the GCT 4 Crossover Cavern, poured concrete for the exterior walls on the WB1 Tunnel (lower westbound) at the 55th St. vent facility, and completed placement of smoothing shotcrete and began to waterproof the archway of the GCT 5 West Wye Cavern at 59th St.

CM013A – 55th Street Vent Facility: MTACC reports that through October 2014 the EAC has increased slightly to \$57.29 million from the previous \$57.24 million. Forecast Substantial Completion remains April 5, 2015. Cumulative progress was 69.46% planned vs. 76.24% actual.

<u>Plenum</u>: Concrete lining of the east & west walls is ongoing. Concrete placement of the Plenum Roof continues in the East Plenum.

<u>Cavern</u>: Welding and erection of the permanent precast stairs is ongoing where space allows at the upper levels. Continued with pneumatically applied concrete final lining of the Cavern Arch.

Preparations began to place concrete lining in the Shaft. This will require removing the temporary construction stair and constructing a moving platform up the shaft.

CM014A– Concourse and Facilities Fit-Out: MTACC reports that through October 30, 2014, the EAC increased to \$56.65M from the previous \$55.51M. This increase is due to the ongoing closeout of outstanding change orders. MTACC Forecast Substantial Completion date continues to be March 31, 2015. As of October 30, 2014, MTACC reported that the actual percent complete was 80.64% 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, delivery and installation of SCADA equipment and the resultant delay impacts to the forecast for testing and Con Ed energizing the system for final testing and commissioning.

<u>Construction Progress</u>: 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 600V cable continues.

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

<u>Construction Progress</u>: Problems continue with producing a viable schedule for this Contract. The Contractor has not demonstrated that it has the capability to produce a viable baseline schedule almost nine months after NTP. The Contractor has committed to submitting a revised baseline schedule in December 2014. The PMOC believes, however, that given the current status of the schedule, production of an acceptable baseline in that time frame will be unlikely. The Contractor has also fallen behind in its submittals and appears to be struggling with basic aspects of the mobilization stage of the Contract.

Queens Contracts:

CQ032 – Plaza Substation and Queens Structures: The Estimate at Completion for CQ032 remained at \$237,347,769 during October 2014. The MTACC forecast for Substantial Completion was shortened by 5 weeks to February 22, 2016. Actual construction progress for October 2014 was 1.9% versus 2.4% planned. Cumulative progress through October 31, 2014, was 68.4% actual versus 69.5% planned.

<u>Construction Progress</u>: During November 2014, the CQ032 contractor completed emergency repairs to the roof of the 23rd St. vent facility at the site of the October 30, 2014 drill bit incident, continued to install conduit and pour concrete benchwall in the 63rd St. Tunnel, placed backfill in the Bellmouth area, erected structural steel for the C06 level floor in the Early Access Chamber, continued to excavate for the foundation of the Yard Services Building, completed concrete pours for interior and exterior walls of the C06 level, and began to place formwork for the C07 level floor in the Q-Tip.

Harold Interlocking:

CH053 Contract – Harold Structures Part 1 and G.0.2 Substation: The Estimate at Completion for CH053 was reduced in October 2014 from \$298,624,003 to \$297,379,424 due to MTACC re-forecast of existing contract modifications. The MTACC forecast for Substantial Completion was extended by 1 week to May 11, 2015. Actual construction progress for October 2014 was 0.4% versus 0.2% planned. Cumulative progress through October 31, 2014, was 92.0% actual versus 100.0% planned (contract was supposed to be complete by now).

<u>Construction Progress</u>: During November 2014, the CH053 Contractor paved the access road on both sides at the west end of Harold Access Bridge, poured concrete approach slabs and installed the walkway and handrail at the ML4 Bridge at 43rd St., continued construction of micro-tunnel Run #s 1-4 at G02 Substation, and completed construction of Tunnel A Emergency Exit at 39th St. For the 12KV duct bank, high potential tests of the C3 feeder and component tests were completed in October 2104.

CH054A – Harold Structures Part 2A: The Estimate at Completion for CH054A was reduced slightly from \$61,384,271 to \$61,271,166 during October 2014 due to MTACC re-forecast of existing contract modifications. The MTACC forecast for Substantial Completion was extended by 1 week to April 17, 2015. Actual construction progress for October 2014 was 3.3% versus 0.0% planned (because the Contract was supposed to be complete by now). Cumulative progress through October 31, 2014, was 89.9% actual versus 100.0% planned.

<u>Construction Progress</u>: During November 2014, the CH054A contractor completed construction of the sewer micro-tunnel adjacent to Loop 1 Track between Thomson Avenue and Honeywell Street (approximately 475 LF long) and continued to install conduit, grout, and began to install cable in the Run #13 cross-track micro-tunnel in "F" Interlocking.

CH057A – Part 3 Westbound Bypass: The Estimate at Completion for CH057A remained at \$105,373,688 during October 2014. The MTACC forecast for Substantial Completion was extended approximately 3 months to August 8, 2016. Actual construction progress for October 2014 was 2.7% versus 0.9% planned. Cumulative progress through October 31, 2014, was 12.1% actual versus 23.1% planned.

<u>Construction Progress</u>: During November 2014, the CH057A contractor removed the B-914 catenary pole and continued installation of soldier piles for the west end of the Westbound Bypass Approach Structure. Through November 30, 2014, the contractor installed a total of 76 soldier piles.

CH057C – Harold Track work: The remaining work in this Contract which includes the demolition of the existing LIRR freight track and the installation of the locomotive and revised primary route (RPR) track must be postponed because of delays to the LIRR H3 cutover. H3 was initially scheduled to be cutover in December 2014, but is now delayed until November 2015. ESA has directed the Contractor to place the Contract on hold pending further notification. The PMOC will consequently suspend its reporting on this Contract until the work resumes.

Railroad Force Account:

FHA01 – Harold Stage 1 Amtrak: The Estimate at Completion for FHA01 remained at \$18,824,861 during October 2014. The MTACC forecast for Substantial Completion was

extended by 6 weeks to July 12, 2016. Actual construction progress for October 2014 was 0.0% versus 0.3% planned. Cumulative progress through October 31, 2014, was 97.3% actual versus 98.7% planned.

<u>Construction Progress</u>: During November 2014, the Electric Traction Department continued to make limited catenary and signal wire transfers between Thomson Avenue and Sub 44, although this work was not reflected in the ESA monthly progress report.

FHA02 – Harold Stage 2 Amtrak: The Estimate at Completion for FHA02 remained at \$45,369,618 during October 2014. The MTACC forecast for Substantial Completion was extended by 3 weeks to December 7, 2017. Actual construction progress for October 2014 was 1.2% versus 1.3% planned. Cumulative progress through October 31, 2014, was 89.8% actual versus 90.3% planned.

<u>Construction Progress</u>: During November 2014, the Electric Traction Department continued limited catenary and signal wire transfers between Thomson Avenue and Sub 44 and the C&S Department continued to support LIRR preparations for the cutover of the new "H4" CIL in Harold Interlocking.

FQA65 – Loop Interlocking Amtrak: The Estimate at Completion for FQA65 remained at \$29,663,652 during October 2014. The MTACC forecast for Substantial Completion was extended by 1 month to October 19, 2019. Actual construction progress for October 2014 was 0.4% versus 4.0% planned. Cumulative progress through October 31, 2014, was 6.8% actual versus 14.1% planned.

<u>Construction Progress</u>: During November 2014, C&S personnel continued limited installation of signal trough, conduit, and the retaining wall along Loop 2 Track in future "T" Interlocking and continued to support LIRR preparations for cutover of the new "H4" CIL.

FHL01 – Harold Stage 1 LIRR: The Estimate at Completion for FHL01 remained at \$20,804,621 during October 2014. The MTACC forecast for Substantial Completion remained at September 18, 2015. Actual construction progress for October 2014 was 0.4% versus 2.0% planned. Cumulative progress through October 31, 2014, was 99.1% actual versus 95.2% planned.

<u>Construction Progress</u>: During November 2014, LIRR Electric Traction personnel continued to install 3rd rail apparatus at the new turnouts that LIRR had installed earlier in the year.

FHL02 – Harold Stage 2 LIRR: The Estimate at Completion for FHL02 remained at \$76,619,172 during October 2014. The MTACC forecast for Substantial Completion was shortened by 3 months to January 2, 2018. Actual construction progress for October 2014 was 1.5% versus 2.9% planned. Cumulative progress through October 31, 2014, was 59.5% actual versus 64.6% planned.

<u>Construction Progress</u>: During November 2014, LIRR C&S personnel continued to install signal trough, conduit, pull and terminate cables, and pre-test and adjust signal circuits in preparation for the "H4" CIL cutover, scheduled for the first weekend in December. LIRR communication personnel continued to install wooden poles and pull cables between Location 30 at Woodside Interlocking and 43rd St. in Harold Interlocking.

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

As-Built Process Audit: The ESA Quality Manager will conduct an As-Built Process Audit on the Contractors for the following Contracts in December 2014: CH057A, CS179, and CM006. Contracts CH053, CH054A, CQ032, CM004, CM014A, CM005, CM013, and CM013A were audited earlier this year. Additional/follow up audits with the CM office and GEC will be performed to ascertain/identify any inconsistencies in the submittal process and implementation of any as-built information received by the GEC, including whether the GEC is actually reporting back to the CM.

CS179 (Systems Package 1 – Base Contract): The CS179 ESA Construction Manager sent a letter to the contractor regarding unacceptable performance of submittals and document control. There are a number of issues that will be addressed with the contractor at the next Quality Management Meeting in December 2014. The contractor will be informed that they must have all their required submittals in and required/necessary staff in place by mid-January or ESA Quality will issue nonconformance reports.

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 need to be trained in completing the daily construction reports. The auditors also recommended that columns providing additional information pertaining to RFIs need to be added to the RFI logs. Since there were similar findings and recommendations for other contracts, the ESA Heavy Civil Project Executive prepared a response to the auditors. MTACC Quality agreed with most of the response and is working with the ESA staff to resolve the remaining issues.

Quality Training: The ESA Quality Manager conducted workshops/training on close-out procedures to contractors on the new ESA contracts and on some of the existing ones. Training on close-out procedures, as well as on nonconformance reports and as-builts, will continue in December 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 requirements. MTACC Quality agreed and the revised the checklist. In addition, many redundant questions were eliminated from the initial checklist. Training for the ESA Quality staff on the revised checklist is scheduled for December 4, 2014.

2.0 SCHEDULE DATA

ESA submitted its IPS #63 data date November 1, 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."

The significant issues in the current IPS update are:

• Although Construction has progressed on CM006; the Contractor's current update shows that they are trending roughly three months behind schedule. ESA stated that they are

working with the Contractor to develop an acceptable recovery schedule. The Contractor provided their Direct Cost Breakdown (DCB) but it was returned on October 29, 2014 to revise and resubmit. CPM Schedule Update No. 1 was submitted on October 10, 2014, and returned requesting actual status only for the period ending September 30, 2014.

- CS179 Substantial Completion of 11/26/19 is being held, pending an acceptable baseline schedule submittal. Contract CS179 was awarded on March 31, 2014, and the Contractor has not been able to submit an acceptable baseline schedule. Delays in CQ032 are currently driving CS179 contractual Access Restraint dates: however, a Contract Modification is pending that will ensure that CS179 cannot claim delay due to the CQ032 contractor's lack of progress, unless it is determined that CQ032 is due an excusable time extension, which could translate into a CS179 excusable time extension.
- As noted above in the discussion of the various Harold contracts, nearly each of them has seen schedule slippage this month and it represents the lack of a coherent and credible Harold execution plan. ESA leadership for Harold has given several presentations regarding slippages and rescheduling but no full newly re-forecast Harold schedule or work plan has been incorporated in the IPS.

The common denominator in all the above issues is that all three contracts: CQ032, CM006, and CS179 have the same Contractor. It should also be noted that in both Contract CM006 and CS179, the Contractor is obligated to submit a master integrated schedule for all three contracts. Not being able to produce proper schedule for each Contract, obviously, will jeopardize the creation of an integrated schedule, and could cause difficulty later on with interface coordination on the CM007 Contract.

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, November 18, 2014 in update #61 and current update at December 16, 2014. Although the current update indicates a December 2014 advertisement date for this package, ESA has acknowledged that the package will not be advertised at this point until early 2015. Given that the scope and procurement strategy of this package has changed significantly since the June 2014 schedule presented to CPOC, ESA needs to do an analysis of the impact of these changes on the baseline project schedule.

Activity ID IPS- CONTRACT		Activity Name	Start	Finish	Total Float				
	CM014B: GCT Concourse and Facilities Fit Out								
CM014B-1270	CM014B	NTP CM014B GCT Concourse	2-Feb-15		51				
CM014B-1280	CM014B	CM014B - Notice of Award		2-Feb-15	51				
		CM007: GCT Caverns							
CM007-1620	CM007	CM007 Advertise	16-Dec-14		45				
CH057	7: Harold Structu	ire - Loop Box Approach, & EBR	R West Appr	oach & Tuni	nel				
CH057-2080	CH057	CH057 Advertise Date	6-Jan-15		44				
CH057-2030	CH057-2030 CH057 CH057 - Bid Due Date 6-Feb-1		6-Feb-15	44					

Project Critical Path: As of November 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.

The critical path in Harold goes through civil speed restrictions, specifically through the H3 cutover then H1/H2 CIL cutover, installation and removal of crossovers, which allows for the Harold CIL to be retired, and the B/C approach structure to be constructed.

Several other major changes to the Harold portion of the IPS have been incorporated; reschedule Year 2015 outage to Year 2016 after cutover of H2 CIL, move the start date of Year 2017 outage to November 2016 from March 2017, and the NTP dates of Harold 3rd party contractors have been revised.

Schedule Contingency: IPS#63 is based on an RSD of December 2022 and has multiple levels of contingency. It is not clear what controls the PMT or MTACC has over these contingencies. ESA has stated that "all 28 days of contractor contingency, and approximately 40 days of turnover buffer have been used in contract CM006 to maintain the IPS schedule until an acceptable recovery schedule is agreed upon. The PMOC still maintains its opinion that 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 \$10.1788 budget presented 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 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 project has a funding shortfall of approximately \$2.6B.

Budget/Cost: The ESA October 2014 Progress Report shows the total project progress was 53.2% vs. 53.1% planned against the Current Baseline Budget (CBB) of \$10,178B, and the construction progress as 53.1% vs. 52.9% 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%. In the previous ESA report, there appears to have been some under-counting so the difference was 'caught up' in this month's report. Although ESA had submitted a Cash Flow chart (Table 6 of the Appendix) to demonstrate the amount of planned expenditures in each month, ESA has stated that CPOC has asked for it to be corrected, so the "planned" % basis is unknown at this time.

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 already entails an excess number of budget adjustments to date and in the future, which appears to be operationally complex.

ESA informed the PMOC that it had reassigned values to each of the SCCs as part of their replan (Table 6 of the Appendix) but they have not yet demonstrated how the values were determined or that the structural problems in the SCC have 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.

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.

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<u>Change Orders/Budget Adjustments</u>: The PMT reported that over the last month, four (4) Construction change orders over \$100K were executed for a total of \$1.9M.

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 in October 2014; ESA subsequently held a risk meeting in November 2014.

MTACC intends to perform a package level risk assessment for CM007. 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 a full 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 November 2014. The ESA Risk Manager stated at the November 2014 monthly risk meeting that the CM007 Risk assessment will most likely not take place until early 2015.

Continuing issues with the level of Amtrak force account support, currently at about 30-35% of what is required to maintain the current schedule would be significant and could delay completion of the Harold Interlocking work another three years until 2022 under the worst-case trending scenario. MTACC has sent a letter to the Amtrak Chief Engineer requesting a support commitment sufficient to complete the Harold work by 2019.

ESA initially forecasted that it would recommend an award of the CM014B Package at the November 2014 MTA Board Meeting. As of the end of November 2014, ESA has not selected the highest ranking firms to begin Best-and-Final Offer (BAFO) negotiations to the best of the PMOC's knowledge, making it very unlikely that a recommendation to award will occur this year. Additionally, 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, and delays will impact available Program schedule contingency.

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 November 30, 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 PMOC completed its review and evaluation of MTACC's revisions and responses and submitted its findings to FTA-RII on November 13, 2014.

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, these requirements should have been met by now

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 November 30, 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 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 2.23 vs. 1.70 lost time accidents (LTA) per 200,000 hours. This is slightly lower than last reporting period (2.26). The CM005 Contract has an average of 3.63 LTA, trending higher than the project average but decreasing (from 4.02 LTA) since the last reporting period. 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.

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

7.0 ISSUES AND RECOMMENDATIONS

Design: 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; as well as re-scoping of CH057; CH058; and CH061A as part of the Harold re-planning efforts. 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.

MTACC continues to report the forecast Substantial Completion as March 31, 2015. The PMOC observes that the Contractor will require at least 8-10 weeks minimum to test this six transformer system & provide the report to Con Ed for approval. Approval takes an additional 4 weeks. This must be done prior to the May 15, 2015, Con Ed summer moratorium or wait to complete the work until Labor Day 2015 when the moratorium ends. Accordingly, testing must start by February 2015 at the least. The PMOC further observes that, given the Contractor's history of progress, it is unlikely that this system will be fully energized by May 2015. Actual substantial completion may extend to October 2015. This issue could impact the upcoming CM014-B Contract.

Contract CS179: The PMOC believes that the inability to produce an acceptable schedule eight 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. Contract mobilization activities are incurring delays, which are reducing time to design, fabricate, and install equipment. Additionally, it was decided to change the design of the backbone communication system (BCS) which could further delay completion of design activities for the Contract.

<u>Contracts CH053/54A</u>: 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.

<u>Contract CH057A</u>: 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.

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 November 2014, ESA appears to still have 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 November 2014 meeting, no further progress had been demonstrated, and no timetable for roll out of modules or any schema for data sources for reporting was available.

Project Schedule: 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 eight months into the Contract. This is a key remaining Contract and is one of the most complex. The CM006 Contract has experienced significant delays and ESA has requested a recovery schedule from the Contractor. Additionally, as noted below, the procurement schedules for the CM014B and CM007 Contract packages continue to slip.

<u>Risk Management</u>: As mentioned above, 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, however at this point, cost proposal evaluation is still ongoing. 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 and continuing delays will use up valuable schedule contingency.

Continuing issues with the level of Amtrak force account support, which is currently providing only 30-35% of the planned level required to maintain the current schedule would be significant and could delay completion of the Harold Interlocking work another three years until 2022 under the worst-case trending scenario. This constitutes a significant risk. MTACC has sent a letter to the Amtrak Chief Engineer requesting a support commitment sufficient to complete the Harold work by 2019.

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
BCS	Backbone Communication System
C&S	Communication and Signals
CCC	Change Control Committee
CCM	Consultant Construction Manager
CCU	Code Compliance Unit
СМ	ESA Construction Manager assigned to each contract
CMP	Cost Management Plan
CPOC	Capital Program Oversight Committee
CR	Candidate Revision
CSSR	Contact Status Summary Report
CIL	Central Instrument Location
CPRB	Capital Program Review Board
CPP	Contract Packaging Plan
DCB	Detailed Cost Breakdown
ELPEP	Enterprise Level Project Execution Plan
EPC	Engineering-Procurement-Construction
ERT	East River Tunnel
ESA	East Side Access
ET	Electric Traction
FA	Force Account
FAMP	Force Account Management Plan
FHACS	"F" Harold Alternate Control System
FFGA	Full Funding Grant Agreement
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
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)
PAC	Pneumatically Applied Concrete
PEP	Project Execution Plan
PMOC	Project Management Oversight Contractor (Urban Engineers)
PMP	Project Management Plan
PMT	ESA Project Management Team
PQM	Project Quality Manual
PWE	Project Working Estimate
QA	Quality Assurance
RAMP	Real Estate Acquisition Management Plan
RFP	Request for Proposal
RMCP	Risk Mitigation Capacity Plan
RMP	Risk Management Plan
ROD	Revenue Operations Date
ROW	Right of Way
RSD	Revenue Service Date
SC	Substantial Completion
	*

SCC	Standard Cost Category
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: Su	mmary of	Critical Dates
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	FFGA	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.

**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.

	FFGA			MTA's Current Baseline Budget CBB		Expenditures	
	(Millions)	(% of Grand Total Cost)	Obligate d	(Millions)	(% of Grand Total Cost)	(Millions)	(% of CBB)
Grand Total Cost	\$7,386	100.00 %	\$4,724	\$11,214	100.00 %	\$5,925.6	52.84%
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%	\$5,208.1	52.15%
Federal Share	\$2,683	36.30%	\$1,148	\$2,699	24.07%	\$1,975.5	73.19%
5309 New Starts share	\$2,632	35.60%	\$1,098	\$2,436.6	21.73%	\$1,713.9	70.34%
Non New Starts grants	\$51	0.70%	\$50	\$67	0.60%	\$66.6	99.40%
ARRA	0	0.00%	0	\$195.4	1.74%	\$195.4	100.00%
Local Share	\$3,667	49.60%	\$2,959	\$7,479	66.69%	\$3,332.1	44.55%

Table 2: Project Budget/Cost Table

Elements	Baseline Total Budget (June 2014)	Current Baseline Budget (Oct 2014)	Actual Awards (Oct 2014)	Paid to Date (Oct 2014)	Actual % Budget Invoiced
Construction	\$7,379,296,706	\$7,353,687,141	\$4,907,594,502	\$3,794,153,353	51.42%
Soft Costs Subtotal	\$2,798,474,304	\$2,824,083,869	\$1,602,660,515	\$1,513,877,274	53.61%
Engineering	\$720,615,810	\$720,615,810	\$652,403,994	\$628,511,884	87.22%
OCIP	\$282,613,620	\$282,613,620	\$187,960,159	\$174,847,432	61.87%
Project Mgmt.	\$972,168,644	\$972,168,644	\$646,407,853	\$596,448,334	61.35%
Real Estate	\$182,076,230	\$182,076,230	\$115,888,509	\$114,069,624	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	\$6,510,255,017	\$5,308,030,627	52.15%
Regional Investment Subtotal	\$758,260,953	\$758,260,953	\$272,435,735	\$77,451,851	10.21%
Construction (RI)	\$611,214,337	\$611,214,337	\$213,020,634	\$41,614,493	6.81%
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	\$6,782,690,752	\$5,385,482,478	62.37%
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	\$7,400,297,752	\$6,003,089,478	50.14%

November 2014 Monthly Report

MTACC-ESA

Standard Cost Category (SCC) No.	FFGA SCC Baseline (YOE \$) M	June, 2014 Re- Plan (YOE \$)	Sept 2014 SSC (YOE \$) M	Oct 2014 SSC (YOE \$) M	Oct 2014 % of Re-Plan	Sept'14 to Oct'14 Change \$M	CBB Variance from FFGA %
10	1,989	3,405	3,407	3,426	100.12%	4	72.25%
20	1,169	2,238	2,245	2,233	100.31%	7	91.02%
30	356	474	474	473	99.79%	-1	32.87%
40	205	611	606	606	99.18%	-5	195.61%
50	619	606	609	570	100.00%	0	-7.92%
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%

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

Reasons for Changes to SCC Codes:

SCC codes 10, 20, 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 Code 10 changed due to the transfer of the lower level walls from CM007 to CM005.

SCC Code 20 changed due to the extra funding required for CM013 (from unallocated contingency) and the transfer of the lower level walls from CM007 to CM005.

SCC Code 50 changed due to the CS084 low bid.

ESA Planned Cash Flow As of 8/1/14							
Quarter/year	Construction \$(000)	Engineering \$(000)	OCIP \$(000)	Project Mgmt. \$(000)	Real Estate \$(000)	Rolling Stock \$(000)	
Paid To Date	3,660,194,771	646,377,892	155,604,955	580,041,291	112,634,547	0	
Remaining	3,719,144,273	7 4,237,918	127,008,665	392,127,353	69,441,683	202,000,000	
3Q2014	209,340,620	-3,311,163	4,774,951	16,667,454	0	0	
4Q2014	168,280,817	-3,290,689	4,774,951	16,667,454	0	0	
1Q2015	134,568,200	-3,183,384	4,619,246	16,123,950	0	0	
2Q2015	147,357,357	-3,290,689	4,774,951	16,667,454	0	0	
3Q2015	169,688,509	-3,290,689	4,774,951	16,667,454	0	0	
4Q2015	201,239,698	-3,290,689	4,774,951	16,667,454	0	0	
1Q2016	193,275,933	-3,219,153	4,671,147	16,305,118	0	0	
2Q2016	180,854,738	-3,290,689	4,774,951	16,667,454	0	0	
3Q2016	181,988,455	-1,983,850	4,774,951	16,652,320	0	0	
4Q2016	214,173,807	6,728,414	4,774,951	15,971,281	0	0	
1Q2017	210,556,624	6,509,009	4,619,246	15,450,479	0	0	
2Q2017	199,737,103	6,728,414	4,774,951	15,971,281	0	0	
3Q2017	189,382,506	6,728,414	4,774,951	15,971,281	0	0	
4Q2017	182,084,699	6,728,414	4,774,951	15,971,281	0	0	
1Q2018	174,210,593	6,509,009	4,619,246	15,450,479	0	0	
2Q2018	170,524,739	6,728,414	4,774,951	15,971,281	0	0	
3Q2018	168,497,619	6,728,414	4,774,951	15,971,281	0	0	
4Q2018	155,245,094	6,728,414	4,774,951	15,971,281	0	0	
1Q2019	148,441,548	6,509,009	4,619,246	15,450,479	0	0	
2Q2019	110,893,994	6,728,414	4,774,951	15,971,281	0	0	
3Q2019	93,559,944	6,728,414	4,774,951	15,971,281	0	0	
4Q2019	71,649,848	6,728,414	4,774,951	15,971,281	0	0	
1Q2020	20,704,406	6,582,144	4,671,147	15,624,080	0	0	
2Q2020	11,682,057	6,728,414	4,774,951	15,971,281	0	0	
3Q2020	7,573,078	2,267,183	4,947,825	5,381,627	0	0	
4Q2020	2,750,374	0	5,035,679	0	0	0	
1Q2021	881,913	0	3,256,771	0	0	0	
Subtotal	3,719,144,273	74,237,918	127,008,665	392,127,353	0	0	

Table 5- Cost Analysis Tables- 2014 Re-Plan

Standardized Cost Category	FFGA	May 2012 June 2014 Re-Baseline Re-Plan		Awarded Value (3Q14)	Paid To Date (3Q14)
10- Guideway & Track Elements	\$1,513,998	\$2,943,165	\$3,405,463	\$2,652,239	\$1,731,625
20- Stations, Stops, Terminals, Intermodal	\$1,168,655	\$1,513,998	\$2,238,235	\$1,178,043	\$1,050,349
30- Support Facilities, Yards, Shops, Admin Buildings	\$356,264	\$384,583	\$474,177	\$209,332	\$198,364
40- Site Works and Special Conditions	\$205,105	\$491,341	\$610,570	\$404,844	\$351,822
50- Systems	\$619,343	\$698,296	\$605,592	\$313,913	\$236,574
60-ROW, Land, Existing Improvements	\$165,280	\$203,639	\$219,397	\$153,209	\$151,390
70- Vehicles	\$493,982	\$674,372	\$209,938	\$7,838	\$5,549
80- Professional Services	\$1,184,000	\$1,648,606	\$1,975,398	\$1,485,641	\$1,394,289
Sub-Total	\$6,349,900	\$8,708,000	\$10,177,771	\$6,405,059	\$5,119,962
Estimated Financing Cost	\$1,036,100	\$1,116,000	\$1,036,000	\$617,607	\$617,607
Total	\$7,386,000	\$9,824,000	\$11,213,771	\$7,022,666	\$5,737,569

Table 6- MTA ESA Project Summary By FTA Standardized Cost Categories 2014 Re-plan (\$ in Thousands)

Table 7 – ESA Core Accountability Items									
Project Status:			Original at]	at FFGA C		Current*	ELPEP **		
Cost	Cost Estimate		\$7.368B		\$1	0.178B	\$8.119B		
Schedule	RSI)	December 31, 2013 De		Dec	ember 2022	April 30, 2018		
Total Project Perc Complete	ent	Based on Expenditures				53.2***			
Complete		Based on Earned Value				NA			
Major Issue		Status	atus			Comments	Comments		
Major Procurements Delays		Technical propos received in Augu September 2014. continued as of the ESA did not mak award forecast da this package and date of November CM007. The PM CM007 package sometime in 2015	vas advertised in May 2014; proposals for CM014B were August and cost proposals in 2014. Proposal evaluations as of the end of November 2014. of make its recommendation to cast date of November 2014 for ge and did not make its last forecast vember 2014 for advertising he PMT is now saying that the ckage won't be advertised until n 2015.			PMOC is concerned about the potential project schedule impacts of procurement delays on these two packages, since they are on the critical and near critical paths for the project.			
Project Schedule MTACC presented to the MTA CPO RSD in December incorporates 22 m contingency. It s have been signifi comprising the bar re-planning of the restructuring of the procurement.			C in June 2014 er 2022. This s nonths of Progra hould be noted cant changes in aseline schedul e Harold work	, with an chedule ram level that then that then then then then then then then then	n l re ts	The CM006 Contract has experienced significant delays. ESA has requested a recovery schedule from the Contractor. Additionally, as noted above, procurement of the CM014B and CM007 continue to be delayed. The PMOC is also concerned about the inability of the CS179 Contractor to produce a viable schedule. This is a key remaining Contract which is on the critical path and also one of the most complex.			
Harold Re-planning Harold, as such, t that formed the b presented to the C longer valid.			the Harold base asis of the Prog	eline scho gram sch	edule edule	Work within and around the Harold Interlocking is subject influences outside of the contr of ESA. Continuing issues wi the level of Amtrak force account support, which is currently providing only 30 35% of the planned level			

Table 7 – ESA Core Accountability Items

	• 1 • • • • • • • • •
	required to maintain the current
	schedule would be significant
	and could delay completion of
	the Harold Interlocking work
	another three years until 2022
	under the worst-case trending
	scenario.

* 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.