

PMOC MONTHLY REPORT

East Side Access (MTACC-ESA) Project

Metropolitan Transportation Authority

New York, New York

Report Period January 1- January 31, 2016



PMOC Contract No. DTFT6014D00017

Task Order No. 2, Project No. DC-27-5287, Work Order No.2

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Length of time on project: Eight 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. DTFT6014D00017, Task Order No. 002. Its purpose is to provide information and data to assist the FTA as it continually monitors the Grantee's technical capability and capacity to execute a project efficiently and effectively, and hence, whether the Grantee continues to be ready to receive federal funds for further project development.

This report covers the project 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. Engineering Design and Construction Phase Services

As of the end of December 2015, MTACC reported that the overall engineering effort was 98.7% complete, based on Earned Value for Design Deliverables, compared with a planned status of 100.0%. MTACC's Cost Report shows that 91.4% of the overall "EIS and Engineering" category has been invoiced and 91.36% of the "Design" category (including Design Settlement) has been invoiced.

Design work on the new, stand-alone CH061A package (completion of Queens Tunnel "A") continued. The 100% review submission has been accepted and the package is currently awaiting approval of funding. Contract advertisement had been scheduled for December 14, 2015, but the current forecast is February 2016.

The remaining work on the Track A Approach Structure has been deleted from the CH053 contract to eliminate the current 12kV duct bank issues. ESA plans to have the work completed under the stand-alone Contract CH061A, Tunnel A Construction.

On Contract CM015 (48th St. Entrance), the MTA Board had previously approved the design agreement with the building owner. The building owner agreed to provide the designs for the relocation of the existing interior utilities and to complete some limited structural design. The contract package will be revised and finalized based on the agreements reached during negotiations between the building owners and MTACC. MTACC is continuing discussions with the building owner and is nearing completion of the required easements and construction agreements. The GEC's 60% design submittal is scheduled for February 8, 2016.

The work scope for Contract CH058 is being divided and repackaged into two separate contracts: CH058A will contain the Tunnel B/C Approach Structure and CH058B will contain the East Bound Re-route. Forecast dates for CH058A include: advertise April 12, 2017; bids due June 9, 2017; NTP August 1, 2017. Design work for this package is currently on hold pending completion of a GEC Proposed Change Order. Additionally, the final design for package CH058B is awaiting the completion of a rail traffic simulation study for Harold Interlocking, expected to be completed in early February 2016. Based on the results of the study, LIRR will then make the final decision on building the Temporary Eastbound LIRR Passenger (TELP) track.

Final resolution has been reached on the west end of the Mid-Day Storage Yard (CQ033) regarding what work is to be performed by Amtrak (track and signals) to tie into the ERT (East River Tunnels) and what work will be performed by the CQ033 contractor. Scope changes have included the addition of the Sub 4 to Line 2 connection, approved by Amtrak, and the deletion of the Sub 3 to Line 4 connection. The GEC Proposed Change Order was negotiated and the final proposal was submitted to the PMT. Regarding the Arch Street Yard tie-in, resolution is still required between MTACC and LIRR for final determination on the scope of LIRR Force Account (FA) work. The 100% design was completed and sent to the Construction Manager in November 2015. The PMT, GEC, CM, and LIRR completed a site tour on December 9, 2015. LIRR accepted the current plan in principle, but will complete a review of the details. The package requires design variance approvals regarding LIRR track standards and clearances. Presentations to LIRR were made in January 2016 and a decision regarding the variance is expected in February 2016. The advertise date for CQ033 is currently forecast for 1Q2016.

Contract CS284 (GEC CS086), Tunnel Signal Installation, is a stand-alone package. The MOU with LIRR for inclusion of Positive Train Control (PTC) in this contract is being finalized. The GEC Proposed Change Order for the addition of PTC is being developed. The bid advertisement date is anticipated in mid-2016.

For Contract VS086, Systems Package 3 – Signal Equipment Procurement, the GEC design was completed but is now being revised to incorporate the requirements of Positive Train Control (PTC).

The ESA CM advised that the number of overdue submittal and RFI reviews continues to be an area of focus for the CS179 project team. The PMOC noted that, despite the number of outstanding (pending or in-progress) items noted on the meeting Agenda, the CS179 project team appears to be making an improvement over past attempts to address this issue. The ESA CM will continue to work with the GEC to reduce the overdue backlog even further.

Additional details are provided later in Section 1.0c. under CS179.

b. Procurement

As of the end of December 2015, the ESA Cost Report showed that total procurement activity for the project was 71.7% complete, with \$7.298 billion awarded out of the \$10.178 billion current projected budget.

The CM007 package was advertised on December 23, 2014, and contract documents were made available for proposers on January 15, 2015. The pre-proposal conference and site tour were held in early March 2015. The proposal due date was extended four times from May 2, 2015, to September 15, 2015, when seven technical/schedule proposals were submitted. The cost proposal due date was pushed back several times from October 6, 2015, to October 27, 2015, when seven cost proposals were submitted. The PMT technical ranking recommendation letter was finalized, approved, and issued on October 30, 2015. During November 2015, five of the seven proposers were qualified for continued negotiation. Addendum #30 was issued to the three of these remaining proposers, each of which submitted revised costs and schedules, representing the first round of Best and Final Offers, on December 30, 2015. The PMOC notes that ESA has requested the proposers to modify their schedules based on an increase of contract time from 40 to 42 months and, schedule changes to accommodate late site access caused by the Contract CM006 Milestone #2 delay. Final presentations by the proposers were completed in January 2016. MTACC was able to complete the negotiations and the contract was approved by the MTA Board on January 27, 2016. Award is pending final completion and acceptance of the Best and final Offer (BAFO) documents. Delay to program critical path is expected to be two months.

Contract VQ033, Mid-Day Storage Yard CILs, is a separate procurement package that will provide the eight Central Instrument Location (CILs) for Contract CQ033. VQ033 was advertised on August 17, 2015, and bids were received on October 30, 2015. The contract was awarded on January 15, 2016, with a Notice-to-Proceed date of January 19, 2016.

c. Construction

The PMT reported in its December 2015 Monthly Progress Report that total construction progress reached 60.4% complete versus 61.5% planned. The PMOC's calculations, based on data included in the ESA Cost Report, show construction completion at 60.4%. Since the 2014 Re-Plan, ESA has only performed at a rate of 81.2% of the projected accomplishments.

CM004 – 44th Street Demolition and Fan Plant Structure - 245 Park Ave Entrance: The CM004 contract was demobilized in 3Q2014 and MTACC established a Substantial Completion date of September 9, 2014. At the end of January 2016, MTACC upper management signed the Substantial Completion Documents. There are several outstanding items, such as: delivery of Simms' HVAC As-Built Drawings, patching structural steel fireproofing and surveying of the elevator and vestibule leaks which continue to be unresolved from the CM004 contract and remain problems. The PMOC has previously reported that delivery of the remaining limestone facing for the Vent Building, as well as acceptance of the material by the CM014B contractor, remains an issue that prevents CM004 from entering the closeout phase of the contract. The root cause of the problem is that the contractor did not implement proper procedures in delivery, handling, and storage of the stone, causing several pieces to be either chipped or broken. The solution is to inventory the stone and assess the damage. Throughout this ongoing issue the contractor hasn't shown any interest in solving the problem and multiple inventory dates have not been met. The next scheduled inventory date is Tuesday, February 9, 2016.

CM005 - Manhattan South Structures: The MTACC Forecast Value for CM005 decreased in December 2015 to \$242,598,350. The MTACC forecast for Substantial Completion (SC) changed slightly to February 8, 2016 from February 9, 2016. ESA reports that progress of the contractor's PAC operation continues to lag and may slip beyond the contract SC date. Actual construction progress for December 2015 was 3.7% versus 5.4% planned. Cumulative progress through December 31, 2015, was 95.0% actual versus 95.6% planned.

Construction Progress: During January 2016, the contractor completed placement of arch pneumatically applied concrete (PAC) in the GCT 1 & 2 East Wye and also continued at the west Wye. The contractor also continued arch PAC at the upper level north connector tunnel 304, for the interior walls upper level GCT 1 & 2 East Wye, and for the TT1 tunnels. At the 37th St. vent facility, stitch grouting continued in raised bore shafts. The contractor continued duct bench construction in the lower and upper level north connector tunnels. The contractor will commence Fuko grouting and continue contact grouting until the end of the job. The contractor completed south end wall construction in both East and West Caverns and thereby completed all its major work in both caverns. The contractor still plans to complete most work by the Substantial Completion date.

CM006 – Manhattan North Structures: The MTACC Forecast Value for CM006 decreased to \$347,017,403 in December 2015. The MTACC forecast for Substantial Completion slipped three weeks to January 31, 2017. Actual construction progress for December 2015 was 11.7% versus 11.8% planned. Cumulative progress through December 31, 2015, was 51.8% actual versus 77.2% planned. ESA is mitigating delays to CM006 Milestone #2 by modifying access dates for follow on work. ESA must complete a review of a second recovery schedule to achieve a realistic revised schedule. The CM006 contractor's rate of construction progress continues to lag behind the planned progress rate. ESA expects the contractor to achieve a revised Milestone #2 completion in early May 2016.

Construction Progress: During January 2016, the CM006 contractor continued lead abatement and duct bench construction at the 63rd St. Tunnels and Structures. The contractor also continued over break repair of EB4 at the 55th St. Vent facility, to be followed by waterproofing installation. The contractor continued arch construction with the initial layer of pneumatically applied concrete (PAC) at GCT 5 East and West Wyes, and arch PAC at the GCT 4 East Wye and the 50th St. Air Plenum. In the lower level westbound tunnel (WB1), between the assembly Chamber and GCT 5 West Wye, the contractor continued waterproofing installation. Wall construction continued at Cross passages 7 and 8. The contractor continued duct bench construction at GCT 4 East and West Wyes, and Tunnel EB2. The contractor completed the lower and upper mezzanine slabs and exterior walls at the north end of the Eastbound Cavern Back of House (BOH). During December 2015 and early January 2016, the contractor continued Westbound Cavern BOH construction of upper level slab and exterior walls at the north end of cavern. The contractor continues to work three shifts, but is not meeting the recovery schedule milestones. ESA must complete their review of the contractor's Second Recovery Schedule submittal, and develop a realistic contract schedule.

CM013A – 55th Street Vent Facility: MTACC reported that Substantial Completion was declared on November 20, 2015, ahead of the revised date of December 7, 2015. In its 4Q2015 report, MTACC stopped reporting on this project. Accordingly, this January 2016 PMOC Monthly Report will be the PMOC's last report on Contract CM013A.

CM014A – Concourse and Facilities Fit-Out Early Work: MTACC reports that through December 31, 2015, the Forecast at Completion for CM014A remains \$58,414,993. MTACC reported the forecast date for Substantial Completion has been extended to February 29, 2016, from the previous date of January 31, 2016. This is because, through January 2016, the South Substation has still not been fully energized, with only three of the total six feeds energized. Actual construction progress for December 2015 was 0.2% versus 4.8% planned. Cumulative progress through December 2015, was 93.4% versus 100.0% planned. MTACC reported planned versus actual percent complete has been inconsistent throughout 2015, with no explanations given in the respective MTACC reports.

Construction Progress: During January 2016, ConEd energized two additional feeders, for a total of three of the six feeds in the South Substation. The contractor began scheduling and conducting training for the CM014B contractor so that it can take over operation and maintenance of the equipment and systems, such as the FM 200 Fire Suppression System. The Project Office has advised that through January 31, 2016, there were 212 items on its list of contractor's Open Items. The contractor has completed cleaning of two of the transformer shutters. There are six transformers and all of the shutters must be cleaned. This is a big issue because one feed goes down Shaft #2 to the Caverns and another goes to a separate substation on 2nd Ave. The remaining feeds must be energized because the shutters can't be cleaned on an energized transformer.

CM014B – Concourse and Facilities Fit-Out: MTACC reports that, through December 31, 2015, the Forecast at Completion for CM014B decreased to \$461,967,500 from the previous \$468,446,075. The Substantial Completion date remains August 18, 2018. Actual construction progress for December 2015 was 4.1% versus 4.4% planned. Cumulative progress through December 2015, was 10.6% actual versus 7.3% planned.

Construction Progress: Surveying in the Concourse is continuous and will be on-going throughout this contract.

Concourse (Madison Yard): The contractor continues with layout, excavation, installation, and installation of ductbanks in Zones 3-5. Work is continuing with waterproofing, rebar, forming and placement of cast-in-place manholes and ejector pits. Placement of CLSM (Controlled Low Strength Materials) continues to advance to Zone 5 behind subgrade preparation and underslab work, going from south to north. Formwork, rebar installation, and concrete placement continues for the headers along the top of the new masonry walls.

Demolition (Hog Houses & MTA Building): Demolition has been delayed by MTACC. Relocation of personnel will be to the new trailer park on E. 52nd St., which is not completed. The MTA CCU has advised that demolition permits must be issued for this work.

Milestone #1 (Complete TMC Room, CC-C5, C2 Comm. Room & F/O Backbone Route): Wall stud framing is complete. Raised data floor installation and below floor electrical cable trays installation continues. The CM014B electrical contractor has reported that the layout/coordination for the overhead work is complete and it can make everything fit. Issues with compatibility between the CM014B and CS179 design drawings, as well as overall coordination and information flow between contracts have also affected the CM014B contractor's ability to achieve this milestone by its scheduled date. Accordingly, the original Milestone #1 date of March 6, 2016, is now forecast for April 15, 2016.

Biltmore Connection: Structural steel shop drawings for the connection are under review.

Dining Concourse Connection: Structural steel shop drawings for the framing for the escalator opening at the Dining Concourse Level are under review.

East 48th St. Entrance: Excavation and temporary hanging of existing utilities continues along E. 48th St. Mechanical excavation (Hoe Ramming) of rock is ongoing toward the specified MTACC hold point. The start of rock blasting is pending and line drilling is scheduled to begin on February 16, 2016, with blasting scheduled to begin approximately February 24, 2016. The Milestone #5A to complete this work is November 25, 2016.

East 50th St. Vent Plant: There is a 12” raised data floor in the ICC (Information Command Center) Room. This room is a part of Milestone #2, due on June 4, 2016. There are three chillers that have been delivered to the site. They are being temporarily stored on site while the equipment pads are being completed.

Systems Contracts:

CS084 – Traction Power Substations: As of the end of December 2015, the Forecast and the Budget for the CS084 contract both increased with no explanation, from the previously reported value of \$78,373,772 for both. The Budget and Forecast shown in MTACC’s December 4Q2015 report is \$79,717,772 and \$79,419,413, respectively. MTACC’s and the contractor’s forecasts for Substantial Completion are both December 2019. In its December 2015 Monthly Report, MTACC shows a progress curve for the CS084 contract that presents actual contract progress as 3.1% versus a planned 6.3%; numbers that are based on actual versus projected costs, not physical construction efforts. An analysis of the status of the work activities shown on the approved baseline schedule is necessary to determine the status of the progress of physical work on this contract. The PMOC has requested a copy of the CS084 approved baseline schedule in Primavera format for analysis.

Design Progress: The contractor continued with the transmission of contractual submittals and its design development of the substations. The contractor requested that a meeting to finalize the design of the C05 switchgear equipment be convened, as the design of this equipment sets the standard for the switchgear equipment at all the other substations and allows the fabrication of the C05 equipment to start. Further, the initial design of the C08 substation was submitted to the MTA and is currently under review. Once the C08 substation design is approved, it will be used as the basis for the rest of the substation designs. The General Engineering Consultant (GEC) is still making changes to the C05 substation (Vernon) design to address the interference issue between a ventilation duct and the equipment hatch. The GEC is also working on design changes to address the penetration to the track level and room beam height issues at this facility. Implementation of the design changes must be negotiated with the CS179 contractor and progressed before the CS084 contractor begins work in the C05 facility.

Construction Progress: As of mid-January 2016, the only field construction effort, other than surveying field locations, acted upon by the CS084 contractor was the installation of the property line box that will serve as the interface between the electrical feeders from Consolidated Edison and the signal power feeds for locations in Harold interlocking. The execution of this work was made feasible when, in mid-December 2015, the contractor was directed to proceed with extra work associated with the installation of the L3 Service work. This \$527,000 retroactive contract modification was scheduled to be fully executed in early January 2016 so that the contractor

could continue with the modification work that was scheduled to start on January 20th. However, as of the end of January, the modification was not executed and work did not start. The contractor has advised the CS084 ESA project team that the wet wall condition at the Vernon facility needs to be permanently mitigated before any equipment is installed. It was noted that the grouting effort tried by the CS179 contractor did not mitigate the problem. More investigation and identification of alternative methods to mitigate the condition need to be undertaken by the GEC.

CS179 – Systems Package 1: As of the end of December 2015, MTACC’s Budget and forecast for CS179 remained at \$606,938,540. In its December 2015 Monthly Report, MTACC shows a progress curve for the CS179 contract that presents actual contract progress as 16.5% versus a planned 16.6%; numbers that are based on actual versus projected costs, not physical construction efforts. As presented, these progress numbers imply that the contract is ahead of schedule; however, it is unclear to the PMOC how MTACC can reach this conclusion when, in its October 2015 Monthly Report, MTACC acknowledges that several contract milestones are already behind schedule. Additionally, the contractor continues to verbally assert that there are significant delays in meeting 60% of the contract milestones. The PMOC has requested a copy of the contractor’s monthly schedule updates and MTACC comments on those updates. Upon receipt, the PMOC will perform an assessment of schedule progress. While as of the date of this report, the PMOC had yet to receive the requested documents. The ESA CS179 construction manager (CM) agreed to provide the requested schedule documents to the PMOC for the PMOC’s review and assessment of schedule progress. On November 6, 2015, MTACC exercised three contract options, with no change to the overall contract price. Two of these options, Option No.6 – Obsolescence Management and Option No. 7 – Specialty Equipment for Options, were executed on the day specified in the conformed CS179 contract documents. The third option, No. 2A – 63rd Street Tunnel, although also executed on the day specified in the conformed CS179 contract documents, was only part of the “Option No. 2” specified in the conformed contract. The other portion of this option, now designated “No. 2B - Manhattan Work”, must still be executed and MTACC is currently forecasting this to occur in April 2016, contingent upon funding availability. In January 2016, the MTACC modified the CS179 contract by splitting Contract Option No. 3 – GCT Concourse Systems into two separate options, now designated as Option No. 3A – GCT Concourse 1 and Option No. 3B – GCT Concourse 2. This contract modification separates the scope of Option No. 3 into Option No 3A and Option No. 3B, establishes the Option exercise dates for Option 3A and Option 3B, and redefines the Access Restraints associated with Option No. 3 as those associated with Option No. 3A and Option No. 3B; all with no change to the overall contract price. As the systems designs have progressed, several potential Buy/Ship America compliance issues with contract material and systems equipment have been identified. These potential issues include Closed Circuit Television (CCTV) equipment, Heating Ventilation and Air Conditioning (HVAC) units, variable frequency drives for motors, and door hardware for pressurized doors. All of these potential Buy/Ship America compliance issues are under investigation to determine if the items are non-compliant and if waiver requests are required.

Design Progress: As of the end of January 2016, there are still three of the required Preliminary Design Review (PDRs) that need to be held. Several Second Design Reviews (SDRs) were held and more are planned for February 2016. At the most recent Monthly Progress Meeting, the ESA CS179 advised that the number of overdue submittal and Request For Information (RFI)

reviews continues to be an area of focus for the CS179 project team. The PMOC noted that, despite the number of outstanding (pending or in-progress) items noted at the meeting, the CS179 project team appeared to be making an improvement over past attempts to address this issue. The ESA CS179 CM will continue to work with the GEC and the contractor to reduce the overdue backlog even further.

Construction Progress: During January 2016, the CS179 contractor continued various elements of work (conduit installations, concrete work, temporary power installations, etc.) at the 2nd Ave.; B10; Roosevelt; Vernon; Tunnels B/C and D; Yard Lead Tunnel; 29th St.; Queens Plaza; and 39th St. facilities. The two Stop Work Orders (SWOs) for work in the control rooms at the Vernon and B10 facilities are still in effect. As previously reported, these SWOs were issued because of the design conflict between the room size and equipment layout in the control rooms. The GEC is still working on solutions to this issue and no date was given for the rescinding of the SWOs. Work at the 23rd Street facility remains on hold as a result of an issue with water infiltration through the concrete floor and discussions with the CQ032 contractor regarding this issue continue. No CS179 contract work is underway in Tunnel A, as a “hand-over” inspection from the CQ032 contractor is still required. New work that will start within the next six weeks includes HVAC ductwork removal and the contract modification repair of concrete at the 2nd Avenue facility, HVAC ductwork installation at the Roosevelt and 2nd Avenue facilities, and the removal of non-hazardous muck at the Vernon facility.

Queens Contracts:

CQ032 – Plaza Substation and Queens Structures: MTACC Forecast at Completion for CQ032 changed slightly in December 2015 to \$259,316,384. MTACC Forecast for Substantial Completion slipped by one month to August 23, 2016, due to redesign of the new shaft at 23rd St. and hand digging work associated with unforeseen obstructions found during earlier work. Actual construction progress for December 2015 was 5.7% versus 5.0% planned. Cumulative progress through December 31, 2015, was 94.4% actual versus 94.5% planned.

Construction Progress: During the month of January 2016, the CQ032 contractor continued MEP work in the Yard Services Building (YSB), and completed exterior brick facing. The contractor continued the interior architectural finish installation and exterior metal cladding and louvers in the Plaza Vent Structure (PVS). The contractor continued Plaza site work, and started excavation in the former Early Access Chamber (EAC) to remove the underpinning supporting the BMT over Northern Blvd. that was installed by a preceding contract (CQ039). In Tunnel A, the contractor continued installation of fire standpipe. The construction of duct benches in the Bellmouth continued, and those in the Northern Blvd. Tunnel were completed in late 2015. The contractor planned to start exploratory work for obstructions at the 23rd St. facility in January. ESA reports the later forecast Substantial Completion date accommodates a project impact from re-design work at the 23rd St. facility.

Harold Interlocking Contracts:

CH053 Contract – Harold Structures Part 1 and G.0.2 Substation: MTACC’s Forecast at Completion for CH053 decreased during December 2015 to \$288,455,573. MTACC did not offer an explanation for the decrease in its December 2015 Monthly Report, but the PMOC believes that, with Substantial Completion approaching, MTACC is deleting significant scope from the CH053 contract, which would help to explain the decrease. The MTACC forecast for

Substantial Completion was extended by four weeks to February 29, 2016. Actual construction for December 2015 was 0.2% versus 0.0% planned (the project was supposed to be complete by now). Cumulative progress through December 31, 2015, was 96.0% actual versus 100.0% planned.

Construction Progress: During early January 2016, the CH053 contractor successfully completed the “burn-in” periods for the C2 and C3 12kV electric traction feeder circuits and Amtrak accepted the circuits. For the remainder of the month, the contractor demolished the existing 12kV duct bank, continued to complete C1 12kV feeder circuit construction and make miscellaneous catenary structure modifications throughout Harold Interlocking, and continued to make various punchlist repairs throughout its jobsites.

CH057 – Harold Structures Part III: MTACC issued Notice of Award and Notice to Proceed to the Tutor-Perini Corporation for Contract CH057 on December 3, 2015. Through January 2016, the contractor began to mobilize and make construction submittals.

Construction Progress: The CH057 contractor has not begun any field construction yet and does not anticipate starting any until late March/early April 2016.

CH057A – Part 3 Westbound Bypass: MTACC’s Forecast at Completion for CH057A increased to \$148,379,253 during December 2015 due to inclusion of costs for authorized CPRs. MTACC extended its forecast for Substantial Completion by two months to April 19, 2017. Actual construction progress for December 2015 was 0.4% versus 12.0% planned. Cumulative progress through December 31, 2015, was 29.7% actual versus 87.7% planned. This large discrepancy grew during 4Q2015 when the contractor did not perform any significant construction activities while it was negotiating Contract Modifications and other CPRs that were authorized in late December 2015.

Construction Progress: After obstructions at catenary pole B-923 were removed in late December 2015, the CH057A contractor resumed installation of soldier piles for the East Approach Structure of the Westbound Bypass Tunnel and installed 21 piles during January 2016. Additionally, after MTACC authorized the contractor to proceed on construction that it had proposed in a long-standing CPR, the contractor resumed work in a different location of the East Approach Structure and installed 4 secant piles. The contractor also continued to de-water the Westbound Bypass work site in preparation for the start of excavation of the tunnel. To date, the de-watering process appears to be successful except for a 250’ long area in the West Approach that has not yet responded according to plan. The contractor will have to obtain the proper design profile elevation for water in this area before it can begin excavation. The contractor also installed six steel communications poles between Woodside and Harold Interlockings, which completed that task, during January 2016.

CH057C – 48th St. Bridge and Retaining Wall: MTACC’s Forecast at Completion for CH057C decreased during December 2015 to \$2,777,992. The MTACC forecast for Substantial Completion remained at February 18, 2016. Actual construction progress for December 2015, was 15.0% versus 4.7% planned. Cumulative progress through December 31, 2015, was 79.1% actual versus 98.4% planned.

Construction Progress: During January 2016, the CH057C contractor completed its construction of the RPR (Relocated Primary Route) in Harold Interlocking. After the contractor completes

thermal adjustment of the continuous welded rail (CWR) that it installed, MTACC intends to in mid-February 2016, declare Substantial Completion for this portion of the CH057C work.

Railroad Force Account Contracts:

FHA01 – Harold Stage 1 Amtrak: MTACC’s Forecast at Completion for FHA01 remained the same during December 2015 at \$18,824,861. MTACC extended its forecast for Substantial Completion by three weeks to August 18, 2019. Actual construction progress for December 2015 was 0.3% versus 0.0% planned. Cumulative progress through December 31, 2015, was 98.8% actual versus 99.2% planned.

Construction Progress: During January 2016, Amtrak Electric Traction personnel continued to make catenary, body span, and feeder wire transfers from existing catenary structures to the new B-913 catenary structures.

FHA02 – Harold Stage 2 Amtrak: MTACC’s Forecast at Completion for FHA02 remained at \$60,150,231 during December 2015. The MTACC forecast for Substantial Completion was extended by 10 months to February 5, 2021. Actual construction progress for December 2015 was 0.0% versus 0.1% planned. Cumulative progress through December 31, 2015, was 100.0% actual versus 97.8% planned.

Construction Progress: During January 2016, Amtrak Communications personnel removed fiber optic cables from existing Signal Bridge 23 prior to its demolition, which is scheduled for February 2016.

FQA65 – Loop Interlocking Amtrak: MTACC’s Forecast at Completion for FQA65 remained at \$33,287,863 during December 2015. The MTACC forecast for Substantial Completion remained relatively unchanged at December 12, 2022. Actual construction progress for December 2015 was 1.1% versus 1.3% planned. Cumulative progress was 16.3% actual versus 56.7% planned.

Construction Progress: During January 2016, Amtrak Signal personnel continued to construct the retaining wall along Loop 2 Track between Loop and future “T” Interlockings and completed installation of signal cables between signal location F2E and the F2 CIH in “F” Interlocking.

FHL01 – Harold Stage 1 LIRR: MTACC’s Forecast at Completion for FHL01 remained at \$24,379,363 during December 2015. The MTACC forecast for Substantial Completion was extended by one month to September 19, 2016. Actual construction progress for December 2015 was 0.1% versus 0.0% planned. Cumulative progress through December 31, 2015, was 86.8% actual versus 100.0% planned.

Construction Progress: During January 2016, LIRR Signal personnel continued installation of signal trough and cables at the “H1” and “H2” CIL locations.

FHL02 – Harold Stage 2 LIRR: MTACC’s Forecast at Completion for FHL02 remained at \$92,932,559 during December 2015. The MTACC forecast for Substantial Completion was extended by nine months to May 15, 2019. Actual construction progress for December 2015 was 1.6% versus 1.4% planned. Cumulative progress through December 31, 2015, was 82.4% actual versus 87.7% planned.

Construction Progress: During January 2016, LIRR Signal personnel continued to install signal cables in and between future “H5” and “H6” CILs, make circuit revisions in “H5” CIL, install

signal conduits at several turnouts and signal bridges in Harold Interlocking and make ESA604 (signal design designation) signal revisions in existing Harold Interlocking. Communications personnel continued to install communications cables at the Woodside Motor Generator location and High Tension personnel installed cables between the Woodside MG location and existing tower 69.

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

ESA Quality Reporting: The PMOC is concerned that the new ESA Organization Chart issued on January 19, 2016, shows the ESA Quality Manager reporting to a Vice President several levels removed from the ESA Senior Program Executive. When informed of this, the MTACC Chief of Quality, Site Security and System Certification requested that the ESA Organization Chart be changed to have the ESA Quality Manager report directly to the MTACC Chief of Quality, Site Security and System Certification and report dotted line to the ESA Program Office.

ESA Quality Staff: The ESA Quality Manager will be discussing his staffing levels with ESA Program and MTACC Quality Management for the replacement of a staff member who resigned. Once resumes are obtained and submitted for review, potential candidates will be interviewed.

GEC Quality: The GEC Quality Manager's last day on the project was September 4, 2015. The GEC Program Manager named a replacement in October 2015. The ESA Quality Manager requested that a formal request for approval of this replacement individual be submitted by the GEC. As of January 31, 2016, however, this had not occurred.

CS179 (Systems Package 1 – Base Contract): On November 1, 2015, the ESA Quality Manager conditionally approved a new Quality Manager for the CS179 contractor for a period of 90 days. The new individual has performed satisfactorily and will be approved as the permanent CS179 contractor's Quality Manager in February 2016.

Conditional Assessment Inspections: Every six months, the ESA Quality Manager performs Condition Assessment Inspections. The plan was to perform conditional assessment inspections on the CQ031 and CQ039 contracts in January 2016, but, other activities took priority, and the current plan is to perform these conditional assessment inspections during February 2016.

CM013: A closeout audit on this contract was held on January 12, 2016, to determine whether any quality issues will prevent this contract from closing. There are three (3) open nonconformance reports (NCRs), including one for pipes fabricated in China that were installed and are now inaccessible. Closure of this NCR awaits resolution between MTACC Legal and the FTA. In addition to the three NCRs that are open, there are thirty (30) open submittals that the Contractor must submit for closure, four (4) contract modifications that must be closed, and Record As-Built drawings that must be resolved with the General Engineering Consultant (GEC).

2.0 SCHEDULE DATA

ESA submitted its IPS #77, data date January 1, 2016, and its variance report to the PMOC.

ESA's IPS #77 continues to indicate that the Critical Path goes through the procurement of Contract CM007 and then to construction of the structure within GCT, the PMT has provided conflicting information regarding the NTP date and Project Period for CM007. In Section 1, IPS Narrative Analysis, of the IPS #77 under Upcoming Contract Procurement the PMT is listing a NTP of 2/25/16, a Project Period of 50 months and a Substantial Completion Date of 4/6/20. In contracts, in Section 2, CSSR, Table Contracts Status Summary Report, CM007 is being reported with a NTP of 2/16/16, a Project Period of 46 month and a Substantial Completion date of 12/3/19. It is not clear why these variances exist. Previously the PMT reported CM007 had a NTP of 2/3/16, with 43 months for Project Period and a Substantial Completion Date of 7/24/19. The PMT is stating the issuance of Addendum 30 for procurement of CM007 caused the significant change in extended Milestone 7 to an Early finish date of 4/6/20. The PMOC will perform a variance with next month's IPS submission.

The PMOC maintains its opinion that ESA's Manhattan Critical Path has 2 concurrent paths because of the delay in Contract CM006 and its logic tie with Contract CM007. ESA's IPS does not show the logic tie between completion of Milestone #2 in Contract CM006 (completion of all work in lower level of Westbound Cavern) and CM007 access to the lower level caverns. Contract CM006 is scheduled to complete work in the lower level tunnels by May 9, 2016, 99 days later than originally scheduled. It should be noted when the PMT was asked about its analysis of this milestone independent of contractor's opinion the date that was discussed was September 2016.

Additionally, it should be noted that there is another hand-off from CM006 (Milestone #6-Substantial Completion) to Contract CS179 scheduled for November 29, 2016.

After finishing Contract CM007, the ESA Critical Path shifts to Substantial Completion of CS179 work within the Train Operation Center (TOC) and finally through Integrated Systems Testing (IST), Starting, Commissioning and RSD. ESA has a significant number of contracts that are "near critical", which by definition are within 45 days of the Critical Path. These contracts are:

- CM006: Manhattan North Structures (West and Eastern Caverns)
- CH054A: Harold Structures – Part 2A (hand off to CH053);
- CH053: Harold Structures – Part 1 & G.O.2 Substation (hand off to CH057);
- CH057D: Harold Track Work: Cutover 3B (Track A) – Future Contract;
- FHA01/02/03/04: Harold Amtrak Force Account Work (integral with the CH contracts);
- FHL01/02/03/04: Harold LIRR Force Account Work; and
- CS179: System Facilities – Package 1 (IST) – Future Contract (hand off from CM007, via critical path);

Contract CS179, Systems Package 1 – Facilities Systems, also shows significant delays in 10 milestones so far. The PMOC believes that the PMT will need to manage the CS179 contract in

a manner consistent with the outcome of the Contract CM007 negotiations based on a full understanding of the complex coordination between the two contracts.

Table 2-1, below shows ESA’s upcoming contract procurement schedule:

Table 2-1¹: Future Procurement Schedule

Contract Description	Advertise Date	Bid Date	NTP	Project Contract Period	Substantial Completion
CM007 ² GCT Caverns	12/19/2014 (A)	Technical Proposal: 9/15/2015 (A)	2/16/2016	46 Months	12/3/2019
		Cost Proposal: 10/27/2015 (A)			
CM015 48 th Street Entrance- Rev #3	8/25/2016	10/20/2016	1/3/2017	24 Months	1/3/2019
CQ033 ³ Mid-Day Storage Yard	4/5/2016	6/2/2016	8/1/2016	40 Months	11/19/2019
VQ033 Mid-Day Storage Yard CIL Procurement	8/17/2015 (A)	10/30/2015 (A)	1/19/2016	46 Months	11/19/2019
CH057 48 th Street Bridge / D Pit and Approach Structure	4/7/2015 (A)	7/9/2015 (A)	12/3/2015	29 Months	5/26/2018
CH061A, Tunnel A	3/14/2016	4/22/2016	5/31/2016	16 Months	9/29/2017
VHA04 Procure Materials for Harold Stage 4 - Amtrak F/A (Buy America)	N/A	N/A	1/1/2016	75 Months	3/8/2022

¹ The PMOC notes that the PMT did not update its variance report to reflect the latest changes in its IPS

² CM007’s technical bid review date has slipped by 2 months to date, although ESA has held the NTP date for January 1, 2016. Any additional complications in the procurement cycle could potentially cause further time loss and a delay to the NTP date.

³ CQ033 was planned to be awarded by the end of 4Q2015, but is now projected to have a 3 month delay. This will cause a corresponding delay in achieving ESA’s first ELPEP cost contingency hold point that has been projected for 4Q2015, and might consequently change ESA’s contingency drawdown.

Table 2-2, below, shows important 90 day Look-Ahead milestone schedules:

Table 2-2: Critical Milestones 90 Day Look Ahead (from ESA IPS #77)

Activity ID	Activity Name	Start	Finish	Total Float
CM014B: GCT Concourse and Facilities Fit Out				
CM014B-MS01	CM014B MS01 - TMC/ CC-C5/ CR-C2 Comms. Room & F/O Backbone Route from TMC-CRC2		15-Apr-16	677
CM005: Manhattan South Structures				
CM005-1040	Milestone 4 Complete Balance of Project (Substantial Completion) - MS60 - (February 6 2016)		8-Feb-16	11
CM007: GCT Caverns				
CM007-0160	CM007 Notice of Award		12-Feb-16	92
CM007-1020	CM007 NTP	16-Feb-16		92
CQ033: Mid-Day Storage Yard Facility				
CQ033-1050	CQ033 Ready for Procurement (Sign/Seal)		27-Jan-18	132
CQ033-1060	CQ033 Begin Advertisement	1-Mar-16		56
CH057A: Westbound Bypass Structure (exclude Slab)				
CH057A-5580	CH057A Milestone 2 - Signal Bridge 16		14-Feb-16	-20

Project Critical Path:

Table 2-3, below shows ESA critical path and its contingencies for three different RSDs.

Table 2-3: ESA Critical path and its contingencies for 3 RSDs

Activity Name	Original Duration	Start	Finish
CM007 Contract	1666	15-Sep-15 A	6-Apr-20
IST Integrated System Testing (PART OF CS179)	101	6-Apr-20	15-Jul-20
Early Revenue Service Date			4-Aug-20
ESA IST Contingency 1 (IST Completion Contingency to LIRR)	169	27-Nov-19	13-May-20
Stakeholder agreed additional IST Contingency 2 (5 months)	154	14-May-20	14-Oct-20
Completion of Integrated System Testing (With Contingency)	0		14-Oct-20
Target Revenue Service Date			12-Feb-21
ESA Program Schedule Contingency	365	15-Oct-20	14-Oct-21
Stakeholder agreed additional Program Contingency (10 months)	304	15-Oct-21	15-Aug-22
ESA Project Substantial Completion for LIRR Final 3 Months	0		15-Aug-22
ESA Planning Contingency Ready for LIRR Final 3 Months Period	30	16-Aug-22	14-Sep-22
LIRR Final 3 Months Period	90	15-Sep-22	13-Dec-22
LATE - Begin LIRR Revenue Service To GCT	0		13-Dec-22
Late Revenue Service Date			13-Dec-22

For the immediate future, the Harold program work schedule remains independent from the Manhattan ESA work schedule and will remain so until the Tunnel B/C cutover, which is presently scheduled for May 2019. The ESA critical path for Harold work includes 55 separate activities that lead to the completion of Harold, and includes several intermediate activities which are predecessors to the Tunnel B/C cutover.

Schedule Contingency: IPS #77 is based on an RSD of December 2022 and has multiple levels of contingency. The PMOC schedule continues to be refined. The PMOC's schedule shows that ESA has 365 days of contingency for a December 2023 RSD. The PMOC had projected a three-month contingency (from 2Q2016 to 3Q2016) that would be used for any of the following conditions:

1. Delay in Final Completion of Contract CM005. This contract is on schedule for a Final Completion in 1Q2016. Based on the current schedule performance, this is not expected to be an issue.
2. Delay in Contract CM006, for which its MS #2 completion has been projected for 2Q2016. The PMOC estimates a three-month delay in this contract that would move completion of MS #2 into 2Q2016, the PMT's latest projection is that MS could finish in 3Q2016.
3. Lack of funding availability for Contract CM007. The MTA Board approved the funding for the CM007 in January 2016. MTACC intends to formally award the CM007 contract

by February 29, 2016. If it does award the contract by that date it will result in only a two month delay in its original plan.

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). ESA will need to obtain funding from this program to award all the options in the CS179 contract and to award the CM007, CQ033, and CH058 contracts. The \$10.178 billion (not including the \$463 million Rolling Stock Reserve) budget, presented to the Capital Program Oversight Committee (CPOC) in June 2014, will make the need for additional funding even greater. Until new funding is provided, the project has a funding shortfall of approximately \$2.6 billion, and is part of the un-funded MTA Budget. In late October 2015, the MTA presented a \$29 billion program to its Board for the 2015 – 2019 funding cycle. Although an agreement has been reached with the Governor, the Capital Plan finding had not been appropriated to the ESA project as of January 31, 2016. Two of the three CS179 options that were due to be exercised in early November 2015 were executed, and Option 2 was split, with the \$7.2 million portion (Option 2A) exercised and a \$70.2 million portions (Option 2B) deferred until April 2016.

Budget/Cost: The ESA 4Q2015 Progress Report shows that the total project progress was 60.4% versus 61.5% planned against the Current Baseline Budget (CBB) of \$10.178 billion. Total construction progress was 60.4% versus 62.2% planned based on the total invoiced amount of construction (details of project budget and expenditures are shown in Appendix B, Tables 2 and 3). The PMOC's review of the Cost Report shows 59.3% completion, which is less than the ESA percentage complete. A PMOC review of the ESA Planned Cash Flow Chart shows that it is based on a Feb 2021 completion date rather than ESA's announced target of 2020 for Early Revenue Service. As a result, the "Planned Value" of construction will be lower than that required to sustain the current ESA Target completion date at any particular time. Based on the cash flow report from ESA, construction progress is 89.6% of what was planned since the rebase lining in 2014. Given the above, this suggests that MTACC's probability of making its projected Revenue Service Date (RSD) is low.

After discussion at several Monthly Cost Review meetings, the PMOC and ESA established that the ESA Planned Cash Flow Chart is based on expenditure of the full budget, with the exception of the project reserve, which is not what ESA plans to do. Consequently, "pay outs" will continue until all contingencies are spent and will not be related to the Plan or the Schedule. The PMOC does not regard that as a proper Cash Flow chart because it shows Planned Progress as lower than it is scheduled to be. The PMOC suggested that ESA update its Cash Flow chart to align it with planned construction progress and completion dates, but, to date, ESA has not yet made these changes.

The PMOC will examine the cost details of the CM007 Contract award when they are made available by ESA.

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
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[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

Change Orders/Budget Adjustments: The PMT reported that, during 4Q2015, nine (9) construction Change Order over/under \$100,000 was executed and four (4) design Change Orders were executed with the GEC for a total of \$860,000.

4.0 RISK MANAGEMENT

The last monthly risk meeting held by ESA was in January 2015. Since that time, ESA has not succeeded in addressing the risk topics as they had planned during the subsequent monthly cost and schedule review meetings. In response to the PMOC’s request, ESA had planned to resume the dedicated monthly risk meetings in October 2015, but, this did not occur because the newly assigned Risk Manager resigned in October 2015. The PMOC is concerned that the risk management area has not been adequately supervised since the re-assignment of the previous Risk Manager nearly seven months ago. ESA identified the new Risk Manager in December 2015 and he started work on the project in January 2016. Regularly scheduled risk meetings are planned to resume in February 2016.

The Contract CM007 risk workshop was conducted over a two-day period on April 8 & 9, 2015. The preliminary risk report was forecast to be issued by April 28, 2015, but this did not occur. At the FTA/MTACC Executive Meeting on May 21, 2015, the FTA and the PMOC were advised

that the distribution of the draft Risk Report was discussed by upper management at ESA-PMT, the MTACC, the MTA, and the MTA President. Because of the very high level of concern about the confidentiality of the risk results, MTA decided to proceed with a very limited internal distribution of the draft Risk Report and a very small group participated in the May 1, 2015, internal briefing. The FTA noted that they and the PMOC had participated in the workshops and requested the opportunity to review the report written by MTACC's risk facilitator. MTACC responded that they would discuss FTA's request with MTA upper management and provide an answer to the FTA. As of January 31, 2016, however, MTACC has not provided the draft risk report. With the MTA Board's approval of Contract CM007 on January 27, 2016, now providing closure on previously identified bid/market risk, the PMOC recommends release of the draft report to assist the PMT in developing the package level register of remaining risks.

Based on long standing issues and concerns regarding Amtrak's ability to provide sufficient force account support to the ESA project, especially Electric Traction (ET) resources, ESA completed a Harold schedule re-sequencing in December 2014, also known as "ESA First," that advances work elements required for the new LIRR service to GCT and delays the FRA funded High Speed Rail (HSR) work beyond 2017. Railroad construction work prior to development of the "ESA First" schedule was also falling behind schedule due to the overall delays to much of the Harold work. On September 16, 2015, FRA approved the MTA-generated grant amendment which will provide the basis to extend the funding. MTACC continues to work with the FRA to have the funding appropriated.

The PMOC has continuing concerns regarding the impact to the ESA Harold work due to the Amtrak program to harden ERT Lines 3 and 4 in preparation for extended outages for ERT Lines 1 and 2 to complete Hurricane Sandy damage-related reconstruction work, earlier scheduled to commence in 2018, but now planned for 2019. Amtrak has not yet provided any specific details about the ERT Lines 3 and 4 hardening work, but, there is concern that significant Amtrak Force Account resources will be needed to support the hardening work, which could further reduce the Amtrak resources available to support the ESA Harold Re-Sequencing Plan. There is also concern that track outages required for the hardening work may conflict with ESA needs to support the planned Harold work. Delays in completing work as scheduled in the Harold Re-Sequencing Plan may result in essential ESA work being pushed back into the timeframe for Amtrak's extended outages for ERT Lines 1 and 2. The PMOC notes, however, that in early November 2015, ESA advised the PMOC that Amtrak is leaning toward closing ERT Line 2 first in 2019. Although this represents a delay from the earlier 2018 forecast time frame, the selection of Line 2 to close first does support the current ESA Harold schedule.

With regard to the implementation of the "ESA First" Harold Re-sequencing of late 2014, the PMOC notes that Amtrak has not been able to provide even the reduced level of force account resources that was planned in support of the schedule. Additionally, the projected force account costs are trending noticeably higher than planned and the force account contingency budget line item is nearly depleted. ESA is currently engaged in a comprehensive study to identify and evaluate the reasons for the appearance of this situation and to make recommendations. The study had been expected to be completed in January of 2016, but the PMT now anticipates completion in February 2016.

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. The MTACC submitted its revised Technical Capacity and Capability Plan (ESA and SAS) on April 13, 2015. The PMOC returned comments to the FTA on May 7, 2015. The MTACC submitted a revised TCC Plan in response to FTA/PMOC comments on June 12, 2015. In August 2015, the PMOC provided the FTA with its evaluation of the MTACC responses to the PMOC review comments and recommended a meeting with MTACC to resolve remaining issues. The FTA subsequently provided MTACC with the evaluation. MTACC responded with a reply on September 24, 2015, and the PMOC will provide its response in February 2016.
- **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; and Risk-Informed Decision Making. The PMOC is particularly concerned about the effectiveness of the risk management process over the last seven months due to lack of continuity of leadership because the ESA Risk Manager position was vacant from October 2015 through early January 2016.
- **Project Management Plan:** The PMOC completed its review and evaluation of the MTACC's revisions and responses and submitted its findings to FTA-RII in 4Q2014. The MTACC subsequently submitted a revised Rev. 10 on March 13, 2015, that included updated information on the Change Control Committee. The revised Rev. 10 of the PMP was reviewed by the PMOC against the PMOC's evaluation in 4Q2014. The PMOC continues to coordinate with MTACC, arranging working meetings with ESA chapter authors and the corresponding PMOC reviewers to resolve the remaining outstanding FTA/PMOC evaluation comments. Several working meetings have been held since June 2015 and continued through January 2016.

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 Schedule Management Plan (SMP) and Cost Management Plan (CMP) sub-plans to the PMP. The PMOC's opinion is that this continues to be a serious deficiency and needs to be resolved as soon as possible. The PMOC's major areas of concern include:

- **Cost/Schedule Contingency:** In November 2014, ESA submitted its initial cost and schedule contingency utilization curves for the new baseline budget and schedule presented to CPOC in June 2014 in order to comply with ELPEP. ESA then stated, however, that it would correct the curves to make them usable by ESA Project Controls staff and acceptable to the FTA and PMOC. The PMOC notes that draft proposed cost and schedule contingency drawdown curves were

presented by the MTACC at the December 11, 2014, ELPEP Quarterly Review Meeting. A series of meetings were held to discuss the MTACC drawdown curves and the FTA/PMOC proposed cost and schedule contingency minimums, the latest occurring on September 17, 2015. There are currently no issues with the FTA schedule contingency minimums, but more discussion is required to reach agreement on the cost contingency minimums.

As of October 1, 2015, MTACC submitted two (2) documents that were intended to demonstrate items related to the ESA Cost Contingency Curve basis. The PMOC notified MTACC, however, that the actual purposes and meanings of those documents was unclear. The documents, rather than being mutually supportive, appeared to be contradictory, and the one that supposedly provides an SCC basis never references SCCs. The PMOC requested further explanation. The PMOC was prepared to discuss the cost contingency minimums at both the October and November 2015 Cost and Schedule monthly review meetings, but MTACC was unable to convene the required staff at those times. On December 7, 2015, the PMOC provided MTACC with the PMOC's evaluation of the MTACC proposed values for the ELPEP minimum cost contingency hold points, along with the basis for the PMOC's position regarding those values. At a special meeting held on January 15, 2016, MTACC and the ESA PMT accepted the FTA/PMOC proposed ELPEP minimum cost contingency hold point values.

- **Schedule Management Plan (SMP):** The ESA project remains non-compliant with requirements for Integrated Project Schedule (IPS) Updating, Forecasting, and Schedule Contingency Management against a current baseline schedule. Given that the new budget and schedule are in place, the PMOC expected that the MTACC would start to meet the requirements set forth in its SMP in the above-referenced areas. The revised SMP was submitted on October 26, 2015, and the PMOC will provide its review results in February 2016.
- **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, but MTACC has not made significant progress in this area. MTACC submitted its revised Cost Management Plan (ESA and SAS) on April 13, 2015. The PMOC returned comments to the FTA on May 8, 2015. The MTACC submitted a revised CMP in response to FTA/PMOC comments on June 30, 2015. In August 2015, the PMOC provided the FTA with its evaluation of the MTACC responses to the PMOC review comments and met with MTACC on November 16, 2015. MTACC began working on additional agreed revisions and is evaluating the PMOC's recommendations in six areas. MTACC provided an initial draft of the revised CMP on December 15, 2015, and the PMOC is currently reviewing this draft.

Revisions to the ELPEP Document: As part of the process of updating the ELPEP document, the PMOC has performed an independent evaluation of the minimum required cost and schedule contingencies going forward. The PMOC's recommendations were presented at several

meetings with the MTACC, the last on May 21, 2015. On October 14, 2015, the PMOC provided the FTA and MTACC with an expanded basis for the PMOC’s recommended minimum schedule contingencies to RSD. MTACC responded on October 27, 2015, with no exceptions taken to the PMOC proposed minimum schedule contingency values. MTACC did, however, have comments on certain bases of the PMOC’s position and the PMOC is preparing a response. On January 15, 2016, MTACC and the ESA PMT accepted the FTA/PMOC proposed ELPEP minimum cost contingency hold point values.

The next ELPEP Quarterly Review Meeting with the MTACC, the FTA-RII, the SAS and ESA projects and the PMOC had been scheduled for January 21, 2016, but will be rescheduled for another date in February 2016.

6.0 SAFETY AND SECURITY

As it has since August 2015, Table 6-1, below, shows the ESA Lost Time and Recordable Ratios for 2015. The PMOC developed this table to demonstrate the effectiveness of ESA’s most recent safety efforts because the PMOC does not believe that ESA’s published cumulative safety reports accurately depict its current performance. Although ESA’s general trend for 2015 showed a general decrease in both Lost Time and Recordable injuries, December 2015 was an abnormal month because ESA suffered 2 Lost Time and 4 Recordable injuries. These injuries yielded the monthly and calendar year ratios shown in the table. Both of the CY2015 ratios are below the ratios established by the BLS for 2015.

Table 6-1: ESA 2015 Lost Time and Recordable Injury Ratios

	Lost Time Ratio	Recordable Ratio
2015 BLS Ratio (used by OSHA)	1.80	3.20
ESA December 2015 Ratio	1.76	5.29
ESA CY2015 Ratio	0.88	2.29
ESA Reported Ratio (Cumulative since beginning of project)	1.99	ESA does not report cumulative Recordable Injury Rates

Additionally, the ESA PMT did not report any significant security issues in its December 2015 Monthly Progress Report.

7.0 ISSUES AND RECOMMENDATIONS

Design: The PMT design management team needs to focus on achieving intermediate milestones in a timely fashion and working closely with the GEC to facilitate finalization of the scope of work for the remaining procurement and construction packages. The continued shifting of scope between packages and the creation of new packages has made finalizing design documents and drawings very challenging and time consuming. The PMOC continues to recommend that the PMT develop a design milestone tracking sheet for the remaining design work on the project.

Procurement: The lack of stability in the contracting strategy and Contract Packaging Plan remains a concern. The scope shifting among different packages 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. The current CPP update (revision 10.2) was submitted on November 13, 2015. The PMOC continues to recommend that the ESA PMT should make an effort to adhere to the current version of the CPP and minimize shifting scope for the remainder of the project.

Contract CM004: The PMOC is concerned that with the signing of the Substantial Completion documents MTACC may have lost leverage with the contractor in resolving the issue with the limestone building facing, particularly if it turns out that several stone pieces have to be replaced.

Contract CM014B: The PMOC is concerned that the amount of unresolved questions and coordination with the CS179 contractor, and field issues with the as-built work by the CM014A contract jeopardizes scheduled completion of Milestone #1. Milestone #1 stipulates that completion of the Terminal Management Center (TMC), CC-C5 (Communications Closet), and C2 Communications Room be achieved by March 5, 2016. These spaces were built by CM014A. The CM014B milestone is for completed fit-out of these three spaces.

Contract CS179: The PMOC is concerned that, because the equipment and material designs are still incomplete, Buy/Ship America compliance issues continue to be identified. The design work needs to be completed soon to ensure that all equipment and material, both compliant and potentially non-compliant, is identified in a timely manner to provide time to address any Buy/Ship America issues that might impact the CS179 and overall ESA project schedule.

The PMOC is also concerned about the numerous water infiltration issues in the equipment rooms that are now being identified and the solutions that need to be developed and implemented to provide permanent mitigation of the water infiltration in rooms with electronic equipment. Previous attempts to mitigate the problem by grouting cracks in the concrete floor slabs have not worked and other solutions need to be quickly identified to preclude contract schedule slippage.

Contract CS084: The PMOC is concerned about the design fix for the ventilation duct/equipment hatch interference at the Vernon substation and whether this design fix will be acceptable to the LIRR when the time for inspection, commissioning, and facility acceptance arrives. The ESA CS084 CM needs to ensure that any design fix that is implemented meets with the approval of LIRR; with special consideration for possible long-term maintenance issues for the LIRR. The PMOC has also encouraged the ESA CS084 CM to quickly resolve any outstanding design comments on the C05 and C08 substations so that the final designs for these facilities can be approved and other substation designs can progress.

Contract CH057A: The Change Orders that the CH057A contractor was awaiting during 3Q2015 were finalized in late December 2015. As a result, the contractor resumed installation of secant piles for the East Approach Structure of the Westbound Bypass Tunnel in January 2016. At present, the contractor anticipates that it will deliver its “jacked shield” to the job site in late February 2016, with tunnel excavation scheduled to begin in late March/early April 2016. When that occurs, this issue will no longer be considered a concern and will be removed from this section of the PMOC’s monthly reports.

Contract CM006: The contractor continues to trend behind its second recovery schedule. Currently, the contractor is now over 80 calendar days late for Milestone #2, which leads to a hand-off to the CM007 contractor. MTACC has acknowledged that, despite mitigations that are in progress, recovery may not be achievable. There is also concern because Substantial

Completion of this contract is a key hand-off milestone for the CM007 contract. The inability of the CM006 contractor to successfully execute both the first and second recovery schedules will now impact the CM007 contract and cause a delay to the start of some CM007 work. The PMOC previously stated that this situation could create a change from full access to the caverns to incremental access over a period of time, with resulting cost and schedule consequences. In November 2015, MTACC acknowledged that it would be negotiating the delayed access schedule change with the CM007 proposers. The cost and schedule impacts will not be known until Contract CM007 award details are provided in February 2016. The PMOC recommends that the ESA PMT and the contractor develop a realistic schedule revision that properly reflects the contractor's capability and capacity to perform its remaining work.

Contract CM007: The PMOC had earlier expressed concern that the technical/schedule proposal due date was delayed a total of 4.5 months and the cost proposals were delayed an additional 3 weeks. This significantly reduced the time for negotiations on this very large contract that is currently on the program schedule critical path. MTACC was not able to meet its original planned award date prior to December 31, 2015. However MTACC was successful in expediting completion of the negotiating process and the MTA Board approved the CM007 contract on January 27, 2016. Because the project critical path includes a significant portion of the CM007 work, the PMOC remains concerned about the schedule impacts of the delayed award and NTP for the CM007 contract. The actual incurred delay is approximately one month. Award is now pending final completion and acceptance of BAFO documents. Delay to project critical path is expected to be two months. Although the initial reports about a favorable cost proposal distribution are encouraging, the subsequent need to negotiate a delayed access schedule change, due to the CM006 Milestone #2 delays, raised concerns about potential adverse cost and schedule impacts. The PMOC will evaluate these impacts based the Contract CM007 award details that are expected to be made available in February 2016.

Project Funding: As stated in the Risk Management section below, the PMOC believes that the timing and availability of funding presents a significant schedule risk to the project. The timing of funding has already impacted the CS179 package (that was restructured with options due to funding availability) and the CM007 procurement that was delayed to the 1Q2016 for award and Notice to Proceed. The PMOC does note that MTACC is fully aware of this situation and the critical role that funding serves in the successful completion of the project. MTACC continues to work closely with the MTA finance group and keeps the FTA up-to-date on developments and issues. The PMOC previously recommended to the ESA Project Controls Group that a funding needs projection be developed along with the cash flow projection to assess the risks to the project should funding not be available in the necessary time frame. ESA has the information to develop a basic funding needs projection and has been working with the PMOC to develop a forecast tool to assist in evaluating funding risk at a more detailed level. The PMOC notes that MTA has been successful in arranging funding to continue work.

Budget adjustments will be implemented to provide sufficient funds to progress CS179 Options and Force Account work.

Project Budget:

ESA did not adequately budget the CM014B package and has used significant cost contingency to cover the contract award amount. The PMOC remains concerned about the adequacy of remaining cost contingency to address major risks detailed in the Risk Management discussion below. The PMOC notes that the project's use of unallocated cost contingency continues to be significant, and the rate at which the Forecast cost increases continues to accelerate. The PMOC has noted to ESA that its analysis shows the Forecast cost to be approximately \$100 million higher than ESA's, and thus causes the remaining Unallocated Contingency to remain below what will be required to complete the project per the ELPEP agreements.

Project Schedule: The PMOC is concerned about the overall state of the ESA schedule, specifically Manhattan and Systems contracts. ESA does not follow its Schedule Management Plan in a number of areas, as noted in Section 5.0 of this report. The SMP update to reflect candidate revisions was submitted in October 2015. Furthermore, the PMT has not yet developed a plan to mitigate its problems with CM007 schedule logic.

Risk Management: In the PMOC's opinion, funding availability continues to be a significant risk on the ESA project. Funding uncertainty has already resulted in the following:

- PMT's delay of the CM007 contract award until 2016 due to budget constraints; and
- The restructuring of the CS179 contract by splitting it into a base contract with seven options, based predominately on access restraints imposed by the CM006, CM007, and CM014B packages. This will significantly increase the construction contract interface risks.

This segmentation of construction packages has created multiple inter-contract interfaces and milestones. In the PMOC's opinion, the probability of successfully achieving all of them is low, and leads to the possibility of a ripple effect of delays and coordination difficulties between contracts. There is very limited opportunity, at best, for the contractors to make up any of the time lost to interface delays due to work site time and access constraints. Should delays start to accumulate, recovery will likely not be possible. Managing inter-contract handoffs and interfaces will be challenging and represents significant MTACC-retained risks. Some of the schedule risks have now been realized because funding was not in place to fully exercise the three options in the CS 179 contract package that were scheduled for November 6, 2015. CS179 Option 2 had to be divided and Option 2B is now forecast five months later in April 2016 based on the assumption that sufficient funding will be available at that time. Access Restraints in the CS179 Contract are correlated to the contract options and the CS179 Contract will also have multiple interfaces with the future CM007 Contract. Given that this work is on the project critical path, delays in awarding the options will result in the use of program schedule contingency.

The PMOC remains concerned about the coordination risk retained by MTACC on the completion of the work in Manhattan, especially construction and testing interface management for the systems work. When combined with the extensive scope re-configuration changes associated with the Harold Interlocking work, the PMOC believes that this may create significant changes to the overall project risk profile.

The PMOC considers the major risks for the Eastside Access Program to be:

- Program Funding;
- Successful execution of dozens of hand-off interfaces across multiple contracts;
- Contractor access and work area coordination in Manhattan;
- Duration of integrated systems testing;
- Continued availability of adequate Amtrak and LIRR force account resources [increasing risk trend noted in 4Q & 3Q2015]; and
- Continued availability of required track outages in Harold Interlocking.

The PMOC notes that although MTACC has actively engaged Amtrak to develop some specific mitigations for the last two risks and continues to work on strategies for mitigating many of the other identified risks, continued shortcomings in provision of adequate force account resources threaten to adversely impact the current Harold schedule and may cause the remaining Harold work to become the project schedule critical path. Many external stakeholder issues with Amtrak and LIRR will remain beyond MTACC's direct control, however, and are likely to complicate development and acceptance of the specific problem resolutions essential to completion of the project.

APPENDIX A - ACRONYMS

AFI	Allowance for Indeterminates
ARRA	American Recovery and Reinvestment Act
BLS	Bureau of Labor Statistics
BOH	Back of House
BAFO	Best and Final Offer
C&S	Communication and Signals
CCC	Change Control Committee
CCM	Consultant Construction Manager
CIL	Central Instrument Location
CLSM	Controlled Low Strength Material
CM	ESA Construction Manager assigned to each contract
CMP	Cost Management Plan
CMU	Concrete Masonry Unit
CPOC	Capital Program Oversight Committee
CPP	Contract Packaging Plan
CPR	Contractor Proposal Request
CPRB	Capital Program Review Board
EAC	Estimate at Completion
ELPEP	Enterprise Level Project Execution Plan
ERT	East River Tunnel
ESA	East Side Access
ET	Electric Traction
FA	Force Account
FFGA	Full Funding Grant Agreement
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GCT	Grand Central Terminal
GEC	General Engineering Consultant
HSR	High Speed Rail
IEC	Independent Engineering Consultant (to MTA)
IFB	Invitation for Bid

IPS	Integrated Project Schedule
IST	Integrated System Testing
LIRR	Long Island Rail Road
MOD	Contract Modification
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
NYCT	New York City Transit
PAC	Pneumatically Applied Concrete
PDR	Preliminary Design Review
PEP	Project Execution Plan
PMOC	Project Management Oversight Contractor (Urban Engineers)
PMP	Project Management Plan
PMT	ESA Project Management Team
PQM	Project Quality Manual
PVS	Plaza Vent Structure
PWE	Project Working Estimate
QA	Quality Assurance
RAMP	Real Estate Acquisition Management Plan
RFI	Request for Information
RFP	Request for Proposal
RMP	Risk Management Plan
ROD	Revenue Operations Date
ROW	Right of Way
RPR	Relocated Primary Route
RSD	Revenue Service Date
RTU	Remote Terminal Unit
SC	Substantial Completion
SCADA	Supervisory Control and Data Acquisition

SCC	Standard Cost Category
SDR	Second Design Review
SMP	Schedule Management Plan
SMU	Snow Melter Unit
SSMP	Safety and Security Management Plan
SWO	Stop Work Order
TCC	Technical Capacity and Capability
TELP	Temporary Eastbound LIRR Passenger
WBY	Westbound Bypass Tunnel
YSB	Yard Services Building

APPENDIX B – TABLES

Table 1: Summary of Critical Dates

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

Table 2: Project Budget/Cost Table

	FFGA			MTA's Current Baseline Budget CBB		Expenditures	
	(Millions)	(% of Grand Total Cost)	Obligated	(Millions)	(% of Grand Total Cost)	(Millions)	(% of CBB)
Grand Total Cost	\$7,386	100.0%	\$4,724	\$11,214.0	100.00%	\$6,650.3	59.30%
Financing Cost	\$1,036	14.0%	\$617	\$1,036.0	9.24%	\$617.6	59.61%
Total Project Cost	\$6,350	86.0%	\$4,107	\$10,178.0	90.76%	\$6032.7	59.27%
Federal Share	\$2,683	36.3%	\$1,148	\$2,699.0	24.07%	\$2023.9	74.99%
5309 New Starts share	\$2,632	35.6%	\$1,098	\$2,436.6	21.73%	\$1,761.8	72.31%
Non New Starts grants	\$51	0.7%	\$50	\$67.0	0.60%	\$66.7	99.55%
ARRA	0	0.0%	0	\$195.4	1.74%	\$195.4	100.0%
Local Share	\$3,667	49.6%	\$2,959	\$7,479.0	66.69%	\$4,008.0	53.60%

Table 3: Project Budget and Invoices as of December 31, 2015

Elements	Baseline Total Budget (June 2014)	Current Baseline Budget (December 2015)	Actual Awards (December 2015)	Paid to Date (December 2015)	Actual % Budget Paid
Construction	\$7,379,296,706	\$7,434,206,327	\$5,603,154,580	\$4,377,228,397	58.88%
Soft Costs Subtotal	\$2,798,474,304	\$2,743,564,683	\$1,694,932,194	\$1,654,917,778	60.32%
Engineering	\$720,615,810	\$721,272,879	\$671,184,169	\$658,937,423	91.36%
OCIP	\$282,613,620	\$282,613,620	\$210,470,653	\$210,150,692	74.36%
Project Mgmt.	\$972,168,644	\$972,168,644	\$697,315,739	\$671,212,607	69.04%
Real Estate	\$182,076,230	\$180,298,730	\$115,961,633	\$114,617,056	63.57%
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	\$7,298,086,774	\$6,032,146,175	59.27%

Note: ESA is currently carrying the Rolling Stock Reserve as an off-line cost, not in the Budget.

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

The table content is almost entirely redacted with black boxes. A small yellow square is visible in the lower-left corner of the redacted area.

Table 5: Quarterly ESA Planned Cash Flow- Actuals to Date and Actuals Remaining (as of 4Q2015)

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	74,237,918	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	75,948	0
1Q2015	134,568,200	-3,183,384	4,619,246	16,123,950	4,506,241	0
2Q2015	147,357,357	-3,290,689	4,774,951	16,667,454	4,658,137	0
3Q2015	169,688,509	-3,290,689	4,774,951	16,667,454	4,658,137	0
4Q2015	201,239,698	-3,290,689	4,774,951	16,667,454	4,658,137	0
Remaining Planned	2,688,669,072	93,895,222	98,514,666	292,666,131	50,885,083	202,000,000
Remaining Actual	3,001,511,940	61,678,387	72,462,928	300,956,037	67,459,174	202,000,000
1Q2016	193,275,933	-3,219,153	4,671,147	16,305,118	4,556,873	0
2Q2016	180,854,738	-3,290,689	4,774,951	16,667,454	4,658,137	8,666,545
3Q2016	181,988,455	-1,983,850	4,774,951	16,652,320	4,658,137	13,070,855
4Q2016	214,173,807	6,728,414	4,774,951	15,971,281	4,658,137	13,070,855
1Q2017	210,556,624	6,509,009	4,619,246	15,450,479	4,506,241	12,644,631
2Q2017	199,737,103	6,728,414	4,774,951	15,971,281	4,658,137	13,070,855
3Q2017	189,382,506	6,728,414	4,774,951	15,971,281	4,658,137	13,070,855
4Q2017	182,084,699	6,728,414	4,774,951	15,971,281	4,658,137	13,070,855
1Q2018	174,210,593	6,509,009	4,619,246	15,450,479	4,506,241	12,644,631
2Q2018	170,524,739	6,728,414	4,774,951	15,971,281	4,658,137	13,070,855
3Q2018	168,497,619	6,728,414	4,774,951	15,971,281	4,658,137	14,014,767
4Q2018	155,245,094	6,728,414	4,774,951	15,971,281	50,632	14,014,767
1Q2019	148,441,548	6,509,009	4,619,246	15,450,479	0	13,557,764
2Q2019	110,893,994	6,728,414	4,774,951	15,971,281	0	14,014,767
3Q2019	93,559,944	6,728,414	4,774,951	15,971,281	0	14,014,767
4Q2019	71,649,848	6,728,414	4,774,951	15,971,281	0	14,014,767
1Q2020	20,704,406	6,582,144	4,671,147	15,624,080	0	5,043,553
2Q2020	11,682,057	6,728,414	4,774,951	15,971,281	0	943,912
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
2Q2021	0	0	0	0	0	0
3Q2021	0	0	0	0	0	0
4Q2021	0	0	0	0	0	0
BL Subtotal	3,719,144,273	74,237,918	127,008,665	392,127,353	69,441,683	202,000,000

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

FOIA Exemption 5 U.S.C. Section 552(b)(4) -

Standardized Cost Category	FFGA	May 2012 Re-Baseline	June 2014 Re-Plan	Awarded Value (4Q2015)	Paid To Date (4Q2015)
10- Guideway & Track Elements	\$1,513,998	\$2,943,165	\$3,405,463	\$2,836,785	\$2,186,476
20- Stations, Stops, Terminals, Intermodal	\$1,168,655	\$1,513,998	\$2,238,235	\$1,640,951	\$1,193,792
30- Support Facilities, Yards, Shops, Admin Buildings	\$356,264	\$384,583	\$474,177	\$209,674	\$206,219
40- Site Works and Special Conditions	\$205,105	\$491,341	\$610,570	\$446,115	\$450,053
50- Systems	\$619,343	\$698,296	\$605,592	\$424,472	\$298,417
60-ROW, Land, Existing Improvements	\$165,280	\$203,639	\$219,397	\$153,283	\$151,938
70- Vehicles	\$493,982	\$674,372	\$209,938	\$7,838	\$5,549
80- Professional Services	\$1,184,000	\$1,648,606	\$1,975,398	\$1,578,971	\$1,540,301
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Sub-Total	\$6,349,900	\$8,708,000	\$10,177,771	\$7,298,089	\$6,032,745
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	\$7,915,696	\$6,650,352

Table 7: ESA Core Accountability Items

Project Status:		Original at FFGA	Current*	ELPEP **
Cost	Cost Estimate	\$7.368 billion	\$10.178 billion	\$8.119 billion
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Schedule	RSD	December 31, 2013	December 2022	April 30, 2018
Total Project Percent Complete	Based on Invoiced Amount	60.4 (ESA Figure)		
	Based on Earned Value ±	0.84 (PMOC Calculation)		
Project Performance Rate (Since 2014 ESA "Re-Plan")				
Major Issue	Status	Comments		
Major Procurements Delays	CM014B was advertised in May 2014; ESA was not able to award the CM014B contract in November 2014, as it had forecasted. ESA did award the CM014B Contract and issue Notice to Proceed, however, on February 2, 2015. Additionally, ESA was not able to meet its forecast date of November 2014 to advertise the CM007 Contract. It did, however, advertise the CM007 Contract in late December 2014, and, accept technical proposals in September 2015 and cost proposals in October 2015. As of January 31, 2016, the CM007 Contract has not been awarded.	PMOC remains concerned about the potential project schedule impacts of procurement delays on these two packages, CM014B and CM007, since they are on the critical and near critical paths for the project. Seven CM007 technical/schedule proposals were received on September 15, 2015, and seven cost proposals were received on October 20, 2015. The three remaining qualified proposers submitted Best and Final Offers on December 30, 2015. The CM007 Contract was approved by the MTA Board on January 27, 2016. Contract award and NTP are pending approval of BAFO documents, now expected by February 29, 2016.		
Project Schedule	MTACC presented a new baseline schedule to the MTA CPOC in June 2014, with an RSD in December 2022. This schedule incorporates 22 months of Program level contingency. It should be noted that there have been significant changes in elements comprising the baseline schedule, including full re-sequencing of the Harold work and restructuring of the CM007 package.	The 2014 baseline schedule was adversely impacted by the CM006 Contract, which has experienced significant delays and has yet to meet its production goals included in two recovery schedules. The CM006 performance issue has already impacted the CM007 work that is on the project critical path. The PMOC is also concerned about the continuing lack of sufficient Amtrak Force Account resources to support the current schedule of work in Harold Interlocking.		

Major Issue	Status	Comments
Harold Re-planning	The Harold baseline schedule that formed the basis of the Program schedule presented to the CPOC in June 2014 is no longer valid. Based on continuing issues with slow progress and inadequate railroad force account support, ESA completed a Harold schedule re-sequencing in December 2014, also known as “ESA First”, that advances work elements required for the new LIRR service to GCT and delays the FRA funded High Speed Rail Work beyond 2017.	Work on Harold Interlocking is subject to influences outside of the control of ESA. Continuing issues with the level of Amtrak force account support, currently providing only 70% of required resources, to support the “ESA First” schedule, could further delay completion of the Harold Interlocking work. Continued delays could force the remaining work in the Harold Interlocking onto the program critical path.

*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. This is currently being re-evaluated.