



**Metropolitan Transportation Authority**

# **Capital Program Oversight Committee Meeting**

## **December 2010**

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### **Committee Members**

J. Walder, Chair

J. Blair

A. Cappelli

D. Frasca

M. Page

M. Pally

N. Seabrook

J. Sedore, Jr.

V. Tessitore

C. Wortendyke



## MEETING AGENDA

### MTA CPOC COMMITTEE

December 13, 2010 – 1:45 pm

347 Madison Avenue  
Fifth Floor Board Room  
New York, NY

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#### AGENDA ITEMS

#### Page

#### PUBLIC COMMENTS PERIOD

- |  |       |
|--|-------|
|  | TAB 1 |
| 1. APPROVAL OF MINUTES – NOVEMBER 15                                   | 1 - 1 |
| 2. COMMITTEE WORK PLAN   | 1 - 3 |
| 3. CAPITAL PROGRAM STATUS REPORT                                       | TAB 2 |
| 4. NEW YORK CITY TRANSIT   | TAB 3 |
| Report on Signals and Systems Division                                 | 3-1   |
| McKissack+Delcan Supplementary Reports ( <i>Blue Pages 3-7; 3-11</i> ) |       |
| Performance Indicator Report (Traffic Light Report)                    | 3-12  |
| Agency Red-Light Project Reports                                       | 3-13  |
| 5. NEW YORK CITY TRANSIT PRESENTATIONS ON:                             |       |
| "B" Division Train Arrival Information                                 |       |
| CBTC Roll Out Strategy   |       |
| Lessons Learned for Bringing New Technology to an Aged System          |       |

**MINUTES OF MEETING**  
**MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE**  
November 15, 2010  
New York, New York  
1:30 PM

MTA CPOC members present

Hon. Jay Walder, Chairman  
Hon. James Blair  
Hon. Allen Cappelli  
Hon. Doreen Frasca  
Hon. Mark Page  
Hon. Mitchell Pally  
Hon. James Sedore

MTA CPOC members not present

Hon. Norman Seabrook  
Hon. Vincent Tessitore  
Hon. Carl Wortendyke

MTA Board members present

Hon. Andrew Albert  
Hon. Robert Bickford  
Hon. Susan Metzger

MTA staff present

Linda Kleinbaum  
Ronald Saporita

LIRR staff present

Kevin Tomlinson

B&T staff present

Don Spero  
Joseph Keane  
Robert Redding  
Jim Ferrara

MTACC staff present

Uday Durg

McKissack + Delcan staff present

Michael Kaleda  
Joseph DeVito

\* \* \*

Chairman Walder called the November 15, 2010 meeting of the Capital Program Oversight Committee to order at 1:37 PM.

Public Comments Period

There were no public speakers.

Meeting Minutes

Upon motion duly made and seconded, the CPOC members approved the minutes of the previous meeting held on October 25, 2010.

### Committee Work Plan

Ms. Kleinbaum reported the Committee Work Plan will include the deferred Project Labor Agreement discussion in the future.

### Capital Program Status Report

Ms. Kleinbaum reported MTA agencies planned 50 major commitments, of which 38 (76%) were achieved on or close to goal and with respect to completions, a total of 29 (76%) were achieved on or close to goal.

### Other Program Priorities

Ms. Kleinbaum discussed the new Traffic Light Report, stating that this approach to reporting will emphasize projects where schedule and cost indices are trending in a way that require further analysis. When a report reaches a red light signal it will be accompanied by a pink agency report detailing the full assessment of the project, including the intended course of action, as well as a comment by the Independent Engineer.

### LIRR: New Jamaica Control Center

Mr. Tomlinson reported that Jamaica is a key infrastructure location for the LIRR, given that all train service travels through Jamaica with the exception of the Port Washington Branch. It accommodates 650+ trains per day. There are three separate interlockings: Jay, Hall and Dunton, which together are approximately 2 miles long. The track configuration allows for train access to five station platforms 144 track switches with 163 signals. The modernization of the Jamaica interlocking design was completed in January 2009 with beneficial use achieved in November 2010 at a budget of \$56M, which included design and installation of a new microprocessor technology signal supervisory system, centrally controlled from a single location in Jamaica. Annual operating budget savings of approximately \$1M, as well as numerous operational benefits, are anticipated as a result of the project.

### B&T: Gateless and All Electronic Tolling Pilots

Mr. Spero reported on the gateless tolling pilot project at the Henry Hudson Bridge (HHB), which is scheduled to begin in January 2011; a pilot project for all electronic tolling (AET) will begin in late 2011/early 2012. Following the HHB pilots, this strategy will be extended to the RFK toll plaza. As it replaces its aging toll plazas, it is strategically vital to B&T to leverage technology to maximize both capital and operating savings.

### MTA-Wide Construction Commissioning

Mr. Durg and Mr. Saporita reported MTA's focus on improving commissioning MTA-wide. Commissioning is the process by which project systems are tested and accepted. It requires early and full definition of the operational requirements. Lessons learned from South Ferry highlight the fact that commissioning, if conducted late in the process, resulted in cost and schedule overruns, and over taxed in-housed resources. It emphasized the need to identify complex integration issues early, define cost and schedule risks, communicate clearly defined acceptance criteria to contractors, coordinate availability of resources from users in a timely fashion, and schedule training for personnel. The benefits of timely construction commissioning include: reduced time delays and change orders; effective use of resources; full functionality; and a satisfied user group.

### Adjournment

Upon motion duly made and seconded, Chairman Walder adjourned the November 15, 2010 CPOC meeting at 2:37 PM.

Respectfully submitted,  
Luz Liddie  
Secretary



## 2010-2011 CPOC Committee Work Plan

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I. Recurring Agenda Items

Approval of the Minutes  
Committee Work Plan  
Commitments/Completions and Funding Report  
Follow-up Items as needed

II. Specific Agenda Items

December 2010

*Risk-Based Monitoring*

- NYC Transit Report on Signals and Communications
  - PA/CIS; ATM-B; Flushing CBTC
- Traffic light report for signal/comms
  - Agency red light project reports on issues/mitigations

*Strategic Reviews*

- Update on efforts to bring train arrival info to the B Division
- Lessons learned for bringing new technology into aged infrastructure
- CBTC Strategy Review Plan

January 2011

*Risk-Based Monitoring*

- Quarterly MTA Capital Construction Report on Mega Projects
  - Risk Assessments of 72 St. Cavern
- NYC Transit Report on Subway Cars: Flushing
- Full Quarterly Traffic Light Report with monthly follow-ups as needed
  - Agency red light project reports on issues/mitigations

*Strategic Reviews*

- Car Procurement Program—design issues to be incorporated into R-179's and M-9 specification development

*Program Priorities*

- Quarterly update on Minority, Women and Disadvantaged Business Participation
- ACE Annual Review

February 2011

Annual Commitment/Completion and Funding Report

*Risk-Based Monitoring*

- Red light project follow-up reports (if needed)

*Strategic Reviews*

- Track Benchmarking
- Energy Reduction Initiatives
- Program Management Review: Update on best value review and operating budget savings

## March 2011

### *Risk-Based Monitoring*

- Red light project follow-up reports (if needed)
- NYC Transit Report on Mother Clara Hale Depot

### *Strategic Reviews*

- Update on NYCT Stations Program
- Analytic Reviews of the Bus and Paratransit Program
  - Bus CIS
  - Four bus pilot program
  - SBS Service on 1<sup>st</sup> and 2<sup>nd</sup> Avenue
  - New Paratransit Vehicle
- Program Management Review: Force Account Management

## April 2011

### *Risk-Based Monitoring*

- Quarterly MTA Capital Construction Report on Mega Projects
  - ESA Risk Assessment for Plaza structure
- NYC Transit Risk Assessment on Greenwich Vent Plant
- Quarterly Traffic Light Report and Red Light Follow up as needed

### *Strategic Review*

- Maximizing Use of Shops and Yards
  - RCM/LCM Standardization

### *Program Priorities*

- Quarterly update on Minority, Women and Disadvantaged Business Participation

## May 2011

### *Risk-Based Monitoring*

- B&T Risk Assessment on Bronx Whitestone Bridge Queens Approach
- LIRR/MNR Risk Assessment on PTC
- Red light project follow-up reports (if needed)

### *Strategic Review*

- Update on new Fare Payment System
- Program Management Review: In-house vs. Third Party Engineering

## June 2011

### *Risk-Based Monitoring*

- MTA Police Radio Alternatives Analysis
- NYC Transit Report on Signals/Comms
  - PA/CIS; SONET; Flushing CBTC
- Red light project follow-up reports (if needed)

### *Strategic Review*

- CBTC Strategy
- Operational benefits of significant B&T 10-14 Program

## July 2011

### *Risk-Based Monitoring*

- Quarterly MTA Capital Construction Report on Mega Projects
  - Risk Assessments on 86 St Cavern
- NYCT Report on Subway Car Procurement
- Quarterly Traffic Light Report and Red Light Follow up as needed

### *Strategic Reviews*

- Interplay between ESA Operating Plan & Capital Investments

*Program Priorities*

- Quarterly update on Minority, Women and Disadvantaged Business Participation
- Update on Mentor Program

September 2011

*Risk-Based Monitoring*

- LIRR Risk Assessment on Jamaica Capacity Improvements
- LIRR/MNR Report on M-9 Procurement

*Strategic Reviews*

- Update on NYCT Stations Program
  - Agency report on progress of new strategy
- Benefits of CBTC on Canarsie Line: Full Implementation
- Update on Track

October 2011

*Risk-Based Monitoring*

- Quarterly Traffic Light Report and Red Light Follow up as needed

*Strategic Reviews*

*Program Priorities*

- Quarterly update on Minority, Women and Disadvantaged Business Participation

November 2011

*Risk-Based Monitoring*

- Quarterly MTA Capital Construction Report on Mega Projects
- Red light project follow-up reports (if needed)

*Strategic Reviews*



**Metropolitan Transportation Authority**

**MTA Capital Program  
Status Report**

**through**

**November 30, 2010**

**December CPOC Monthly Report**

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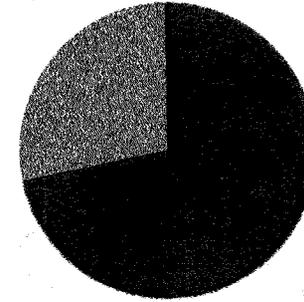
**Capital Projects – Major Commitments – November 2010**

Through the end of November, MTA agencies planned a total of 60 major commitments, of which 43 (72%) were achieved on or close to goal. Since last month, 5 additional projects were committed on-time. Five new delays in commitments are included this month including two at NYCT (PA/CIS 43 Stations Cable Installations and CBTC Culver Test Track); MNR's GCT Trainshed/Tunnel Structure; and two MTA Bus Projects. A full discussion of these and delays in other major commitments are on the following page.

For the full year 2010, 77 major commitments are planned. Of these, 52 (68%) remain on or close to goal. This is a decrease from the 71% year-end result forecast in the prior month.

To date, the agencies have committed \$3.66 billion, and forecast committing a total of \$5.17 billion in 2010, or 76% of the 2010 annual goal for all commitments.

**Year-to-Date Major Commitments**

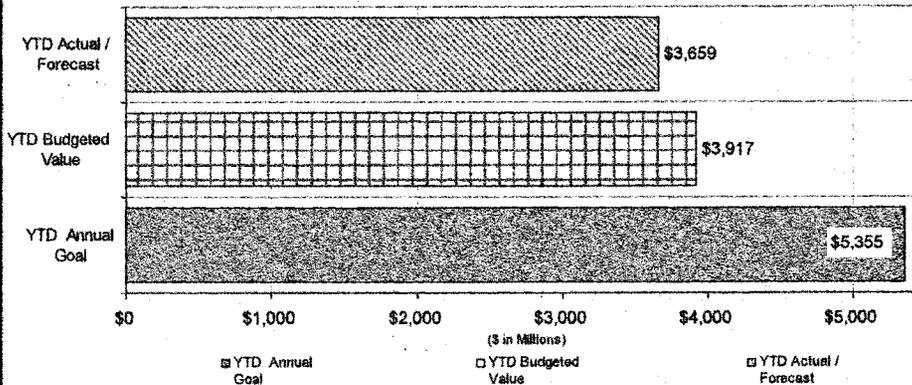


	Year-to-Date Change
Green = Commitments made within 2 months of Goal	43 72% ↑ 5
Red = Commitments delayed beyond 2 months of Goal	17 28% ↑ 5
<b>Total</b>	<b>60 100%</b>

2-2

**Budget Analysis**

2010 Annual Goal	\$6,822	
2010 Annual Forecast	76%	of Annual Goal
YTD Goal	78%	
YTD Actual	54%	68% of YTD Goal
Left to Complete	29%	(\$1,508)



**Year-to-Date Agency Breakdown**

Agency	Prior month variance	
	RED	GREEN
<b>New York City Transit</b>		
14	+2 RED	+3 GREEN
<b>Long Island Rail Road</b>		
5	---	---
<b>Metro-North Railroad</b>		
4 5	+1 RED	---
<b>Bridges and Tunnels</b>		
7	---	+3 GREEN
<b>Capital Construction Company</b>		
3 3	---	---
<b>MTA Bus Company</b>		
3 6	+2 RED	-1 GREEN
<b>MTA Police Department</b>		
2	---	---

## Capital Projects – Major Commitments – November 2010 – Schedule Variances

Project	Commitment	Goal	Forecast
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### 17 Red Commitments (5 new this month)

#### New York City Transit

##### Signals & Communications

VHF Radio System Upgrade	Construction Award	Sep-10 \$295.5M	Dec-10 \$295.5M
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Best and Final Offer was received in September. The selection and responsibility determination were not completed in time for the October Board.

CBTC Culver Test Track (New Item)	Construction Award	Nov-10 \$97.3M	Mar-11 \$97.3M
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Prospective bidders have requested extensions for proposal due dates from August 2010 to November 2010. Contract award rescheduled accordingly.

PA/CIS: 43 Stations - Install Cable (New Item)	Construction Award	Nov-10 \$55.6M	Mar-11 \$55.6M
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Delay due to change in construction strategy from in-house to third party. Advertisement expected in January 2011.

#### Metro-North Railroad

##### Outlying Stations

Bronx Stations/Capacity Improvements	Construction Award	Oct-09 \$9.4M	Jan-11 \$9.4M
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Proposals for the design of CP-09 interlocking on the Harlem Line in the Bronx were originally received in Nov 2009. MNR rejected the proposals and re-issued the design package in April 2010. A consultant has been selected; award is anticipated for January 2011.

##### Track

Drainage and Undercutting Program	Construction Award	Oct-09 \$7.0M	Mar-10 (A) \$8.5M
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An extended NYCDEP permitting review period has caused delays. Budget increase (\$15M) due to addition of scope in 2009 for Middletown drainage and design for Sing Sing Creek Culvert in Ossining.

##### Communications and Signals

Signal System Replacement (MNR Share)	Construction Award	Oct-09 \$25.1M	Apr-10 (A) \$28.6M
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Procurement delays due to extended negotiations with lowest responsive bidders. Budget variance due to high bid results and increased estimates for construction management and flagging after the completion of design.

Project	Commitment	Goal	Forecast
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#### Metro-North Railroad (continued)

PTC Rolling Stock Signals Onboard Design/Radio Spectrum	Construction Award	Sep-10 \$5.3M	Mar-11 \$5.3M
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Delay due to a lack of radio spectrum in the NYC area. The slip into 2011 is due to continued negotiations with federal departments.

##### Grand Central Terminal

GCT Trainshed/Tunnel Structure - Design/Inspection (New Item)	Construction Award	Nov-10 \$7.7M	Feb-11 \$7.7M
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Project Management Plan is being revised to reflect budget and schedule modifications. As a result, the procurement process has been delayed.

#### Capital Construction Company

##### East Side Access

Vertical Circulation	Design and Fabrication (part of VM014)	Jun-10 \$44.7M	Sep-10 (A) \$25.9M
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Commitment was moved to September to reflect additional time needed to conform the contract documents to reflect the negotiated technical and commercial requirements prior to execution and award. The forecast is less than goal due a favorable bid.

GCT Manhattan Structures Part 2	Construction Contract	Jul-10 \$60.0M	Dec-10 \$60.0M
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The schedule was changed as a result of the re-sequencing of the excavation south of the caverns and the removal of the spoils of the excavation. The delay in exercising the CM09 Option is not critical.

##### Second Avenue Subway

72nd St. Cavern, Crossovers, and G3/G4 Mine/Line + Building Demo.	Excavation and Construction	Jul-10 \$661.1M	Oct-10 (A) \$484.1M
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Cost estimate decreased as a result of transfer of tunneling scope to another contract. Award delayed by an extended bid review and qualification process.

#### MTA Bus

##### Bus Company Projects

New Roof and Ventilation at Eastchester Maintenance Building	Construction Award	Mar-10 \$3.1M	Jul-10 (A) \$3.6M
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Schedule variance due to a delay in design completion and to delay in technical authorization letter. Budget increase reflects actual bid results.



**Capital Projects – Major Commitments – November 2010 – Schedule Variances**

Project	Commitment	Goal	Forecast
<b>MTA Bus (continued)</b>			
45 Standard Low Floor CNG Buses	Purchase Award	Apr-10 \$25.6M	Aug-10 (A) \$25.6M
Longer than expected discussions and negotiations due to changes to specs and best and final offers.			
Electrical Upgrade Emergency Generators 4 Depots	Construction Award	Sep-10 \$9.6M	May-11 \$9.1M
Project originally to address 6 depots. 2 depots subsequently split out into separate projects. Schedule and estimate for remaining locations are adjusted accordingly. Additional recent delay due to design revisions that are being required by Con Edison.			
Depot Security Upgrade: College Point, Eastchester & Yonkers	Construction Award	Oct-10 \$2.8M	May-11 \$2.8M
An original delay was due to depots being split out into separate projects. An additional recent delay is due to the consultant not finishing revisions to documents necessary for public bid.			
Power Upgrade - JFK Depot (New Item)	Construction Award	Sep-10 \$2.2M	Dec-10 \$1.6M
Delay due to the separation of this project from another power upgrade project and because the consultant did not finish the revisions to contract documents on time. Budget forecast reduced due to favorable bids.			
New Fueling Lane & Bus Washer at LaGuardia Depot (New Item)	Construction Award	Nov-10 \$8.0M	Mar-11 \$7.1M
Delay due to the legal department's review and approval of the new federal procurement rules as it relates to terms and conditions to minority and women-owned business enterprises (M/WBE).			

## Capital Projects – Major Commitments – November 2010 – Budget Only\* Variances

\*for variances of more than \$5 million or 10%

Project	Commitment	Goal	Forecast
<b>22 Budget only variances (5 new this month)</b>			
<i>New York City Transit</i>			
<i>Passenger Stations</i>			
Dyckman St Station Rehab & Other Component: Broadway/7th Avenue	Construction Award	Jun-10 \$88.3M	Jun-10 (A) \$74.9M
Reflects the results of a favorable bid.			
Station Rehab. Smith/9th & 4th Ave Station Improvement	Construction Award	Sep-10 \$46.2M	Sep-10 (A) \$40.6M
Reflects the results of a favorable bid.			
<i>Subway Cars</i>			
Purchase 23 "A" Division Subway Cars & Convert 10 R42A Cars	Purchase Award	May-10 \$75.4M	May-10 (A) \$116.0M
Budget increase reflects high bid and added scope of CBTC conversion of R42A cars.			
<i>Signals &amp; Communications</i>			
CBTC Flushing	Construction Award	Jun-10 \$347.5M	Jun-10 (A) \$363.6M
Budget increase reflects actual bid results and scope addition of 7 West Extension's CBTC signals.			
Church Avenue Interlocking	Construction Award	Jun-10 \$235.7M	Jun-10 (A) \$191.9M
Reflects the results of a favorable bid.			
<i>Track</i>			
Track & Switch Program May to December 2010	Construction Award	Jul-10 \$210.8M	Jul-10 (A) \$220.2M
The cost increase is due to changed locations, higher shuttle bus and RTO diversion costs; unrealized "piggybacking" opportunities due to cancelled G.O.s; additional G.O.s; and unforeseen asbestos abatement work and engineering issues related to site conditions.			
<i>Bus Depots</i>			
Reconstruct Clara Hale Depot	Construction Award	Oct-10 \$298.2M	Nov-10 (A) \$244.7M
Award initially delayed pending approval of conceptual design and legal review of specifications. Project awarded 11/2/2010. Cost decrease reflects favorable bid.			

Project	Commitment	Goal	Forecast
<i>Long Island Rail Road</i>			
<i>Power</i>			
Rockville Center Substation	Construction Award	Feb-10 \$6.3M	Feb-10 (A) \$5.4M
Delay due to the requirements of administrative adjustments.			
<i>Metro-North Railroad</i>			
<i>Track and Structures</i>			
Turnouts - Mainline/High Speed - (F.A.) & Materials	Construction Award	Sep-10 \$11.6M	Nov-10 (A) \$13.0M
The forecast budget increased due to accelerated scope from next year for the construction of crossovers near Croton-Harmon. Commitment executed on November 1, 2010.			
<i>Bridges &amp; Tunnels</i>			
<i>Verrazano Narrows Bridge</i>			
Tower Painting - Below Roadway Level	Construction Award	Aug-10 \$23.7M	Aug-10 (A) \$19.9M
Reflects the results of a favorable bid.			
<i>Cross Bay Bridge</i>			
Substructure & Underwater Work (New Item)	Construction Award	Dec-10 \$22.0M	Nov-10 (A) \$13.8M
Reflects the results of a favorable bid.			
<i>Robert F. Kennedy Bridge</i>			
Replace T-48 Wearing Surface (New Item)	Construction Contract	Nov-10 \$23.2M	Jan-11 \$9.5M
Bids were opened in November, but must be re-opened in December due to an administrative error in the bid opening process. Forecast budget was reduced due to the favorable bids.			
<i>Henry Hudson Bridge</i>			
Replace Upper Level Sidewalk / Curb Stringers (New Item)	Construction Contract	Nov-10 \$30.0M	Dec-10 \$34.0M
The preparation of procurement documents for this award took longer than expected. Forecast value reflects high bid.			

### Capital Projects – Major Commitments – November 2010 – Budget Only\* Variances

\*for variances of more than \$5 million or 10%

Project	Commitment	Goal	Forecast
<b>Capital Construction Company</b>			
<i>Fulton Street Transit Center</i>			
R Station Underpass & Dey Street Concourse Finishes	Construction Award	Mar-10 \$34.0M	Mar-10 (A) \$25.0M
Reflects the results of a favorable bid.			
Transit Center Enclosure	Construction Contract	Jul-10 \$218.5M	Aug-10 (A) \$225.6M
Award delayed by an extended bid review and qualification process. Commitment value reflects the results of the actual bid.			
<i>7 West Extension</i>			
Site J - Main Entrance at 34th Street Station ( <i>New Item</i> )	Construction Award	Oct-10 \$171.0M	Oct-10 (A) \$130.8M
Reflects the results of a favorable bid.			
Site L (Right of Way - Vent Building)	Construction and Excavation	May-10 \$129.0M	Jul-10 (A) \$65.5M
Site L bid opening was delayed due to questions from prospective bidders. A competitive bidding process ended with a favorable bid.			
<i>Second Avenue Subway</i>			
63rd Street Station Upgrade	Construction Contract	Oct-10 \$152.5M	Dec-10 \$188.2M
A December forecast is reflective of a bid opening delay (to answer questions from prospective bidders). Budget forecast variance is a result of scope changes leading to 100% design.			
<b>MTA Bus</b>			
<i>Bus Company Projects</i>			
New Roof and Ventilation at Baisley Park	Construction Award	Feb-10 \$7.3M	Mar-10 (A) \$8.5M
Budget variance reflects actual bid. Additional scope also had an impact.			
Additional Fueling Capacity: Baisley Park, JFK and LGA ( <i>New Item</i> )	Construction Award	Nov-10 \$3.0M	Dec-10 \$8.7M
Award was delayed because the contract was changed from on-call construction to competitive bid to get a more favorable bid price.			

Project	Commitment	Goal	Forecast
<b>MTA Police</b>			
<i>MTA Police Projects</i>			
Merrick Facility	Construction Award	Mar-10 \$0.6M	Apr-10 (A) \$1.3M
Award delayed to allow for additional time to finalize contract with low bidder.			
K-9 Facility Property	Property Acquisition	Mar-10 \$2.5M	Apr-10 (A) \$1.1M
Award date slightly delayed due to the time required for the assessment and acquisition process. Budget variance (\$14M) due to change in site selection.			

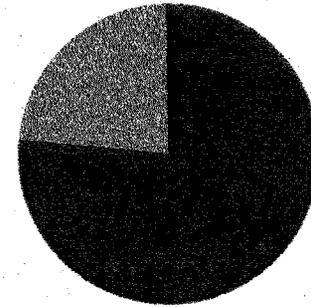
### Capital Projects – Major Completions – November 2010

Through the end of November, MTA agencies planned a total of 42 major completions. Since last month, 4 additional projects have been completed. Of these, 32 (76%) were achieved on or close to goal which is the same rate reported in the prior month. There is one new year-to-date delay reported this month for the F Interlocking Central Instrument Locators project at East Side Access. A full discussion of this and other delays for major project completions can be found on the following pages.

For the full year 2010, 55 major completions are planned. Of these, 37 (67%) remain on target, which is a decrease from the 76% level reported in the prior month.

To date, the agencies have completed \$2.84 billion in capital projects and forecast a total of \$3.93 billion in 2010, or 94% of the 2010 annual goal.

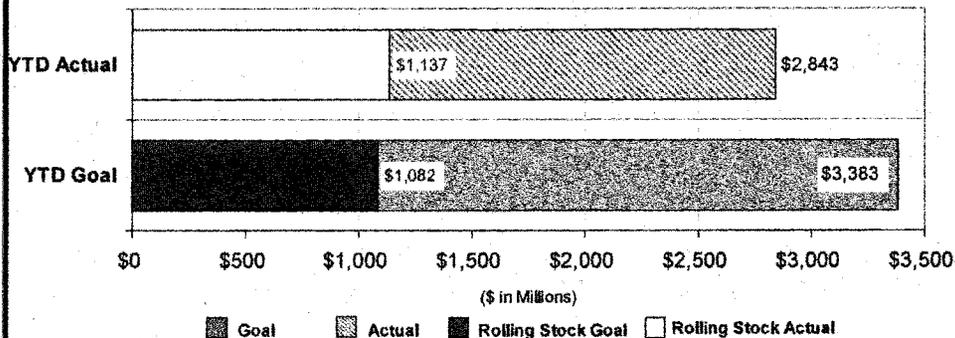
### Year-to-Date Major Completions



	Year-to-Date Change
Green = Completions made within 2 months of Goal	32 76% ↑ 3
Red = Completions delayed beyond 2 months of Goal	10 24% ↑ 1
<b>Total</b>	<b>42 100%</b>

### Budget Analysis

2010 Annual Goal	\$4,162	
2010 Annual Forecast	94%	of Annual Goal
YTD Goal	81%	
YTD Actual	68%	84% of YTD Goal
Left to Complete	28%	(\$1,089)



### Year-to-Date Agency Breakdown

	Prior month variance	
	RED	GREEN
<b>New York City Transit</b>	8	3
<b>Long Island Rail Road</b>	8	2
<b>Metro-North Railroad</b>	7	1
<b>Bridges and Tunnels</b>	5	1
<b>Capital Construction Company</b>	2	3
<b>MTA Bus Company</b>	1	1
<b>MTA Police Department</b>	1	1

### Capital Projects – Major Completions – November 2010 – Schedule Variances

Project	Completion	Goal	Forecast
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#### 10 Red Completions (1 new this month)

##### New York City Transit

###### Stations

Project	Completion	May-10	Dec-10
Columbus Circle Stations Project	Construction	\$110.8M	\$117.0M

Delay is due to the contractor's unsatisfactory workmanship on the Broadway Island entrance stairs and to addition of scope items. Project cost increased due to additional work orders for security fence, temporary storm water basin, sheeting material and relocation of water main. Estimate also increased to extend CCM contract for additional support costs stemming from the extended construction duration.

###### Line Equipment

Project	Completion	Jul-10	Nov-10 (A)
Rehab 2 Vent Plants: 53rd Street/6th Ave & Park Ave/East 53rd	Construction	\$73.1M	\$72.1M

The delay is due to excessive vibration during the acceptance testing at the Park Avenue Fan Plant. In August the Forecast was February 2011. The forecast has been moved up 3 months.

###### Depots

Project	Completion	Jun-10	Dec-10
Charleston Annex Depot	Construction	\$133.1M	\$144.6M

Additional time needed due to contractor problems with commissioning. Project cost increased due to additional work orders and an extension to the construction management contract.

##### Long Island Rail Road

###### Power

Project	Completion	Mar-10	Sep-10 (A)
Replace 3 Substations	Construction	\$37.0M	\$36.2M

Schedule delays due to weather restrictions, LIPA work rescheduling and additional work on SCADA.

###### Rolling Stock

Project	Completion	Jun-10	Jan-11
M-7 Horns	Purchase	\$6.8M	\$4.9M

Delay due to longer than anticipated manufacturing schedule, further extended from Nov-2010 to January 2011. Cost of horns remains lower-than-goal.

Project	Completion	Goal	Forecast
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##### Metro-North Railroad

###### Stations

Project	Completion	Jun-10	Aug-11
Vital Processor System (GCT)	Construction	\$6.5M	\$6.5M

Unanticipated factory testing of touch screens has delayed shipment. Installation subsequently delayed due to track outage availability in GCT. Project extended 10 months due to the added scope (HVAC systems) on the Upper Level Central Instrument Locators.

##### Capital Construction Company

###### East Side Access

Project	Completion	Nov-10	Jul-11
F Interlocking Central Instrument Locators (New Item)	Construction	\$8.9M	\$8.2M

Delay due to longer than anticipated manufacturing schedule. No impact to the East Side Access project schedule.

Project	Completion	Aug-10	Feb-11
GCT Madison Yard Site Prep	Construction	\$40.9M	\$42.7M

All work is on schedule with the exception of the MNR Commissary. No impact to the East Side Access project schedule.

###### South Ferry

Project	Completion	Aug-10	Dec-10
Peter Minuit Plaza and Bollards	Construction	\$22.8M	\$22.8M

Delay due to technical coordination challenges in the fabrication and installation of pedestrian canopy finishes. A plan to completion is now being implemented and all other elements of work are substantially complete and open to the public.

##### MTA Bus

###### Bus Company Projects

Project	Completion	Oct-10	Feb-11
New Roof and Ventilation System at LaGuardia	Construction	\$8.7M	\$8.7M

Federal Aviation Administration issues and work stop-order caused delays in completion.

## Capital Projects – Major Completions – November 2010 – Budget\* Variances

\*for variances of more than \$5 million or 10%

Project	Completion	Goal	Forecast
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### 5 Budget only variances (0 new this month)

#### New York City Transit

##### Subway Cars

Purchase 382 R160 "B" Division Cars	Purchase	May-10 \$842.3M	May-10 (A) \$854.9M
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The higher forecast reflects inclusion of Engineering Force Account and TA labor funds that were originally budgeted but were used to fund the contract award in 2008 within the total approved project budget. All cars are accepted and in their warranty period; NYCT will re-evaluate the estimated need.

#### Long Island Rail Road

##### Shops and Yards

Hillside Maintenance Facility Roof Rehabilitation	Construction	Feb-10 \$5.4M	Feb-10 (A) \$2.9M
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Scope reduction from 7 roofs to 5 roofs along with favorable economic conditions led to a lower than budgeted contract for the work.

Ronkonkoma Parking Lot	Construction	Feb-10 \$4.2M	Feb-10 (A) \$2.7M
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Lower actual completion cost due to a favorable construction bid.

#### Capital Construction Company

##### East Side Access

Metro-North Railroad Mods & Traction Power Relocation	Construction	Jun-10 \$14.8M	Jun-10 (A) \$16.6M
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Budget increased due to a scope transfer from contract CM014 and additional work. No impact to the East Side Access project schedule.

#### MTA Police

##### MTA Police Projects

K-9 Facility Land Acquisition	Property Acquisition	Mar-10 \$2.5M	May-10 (A) \$1.1M
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Award date slightly delayed due to the time required for the assessment and acquisition process. Budget variance due to change in site selection.

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## **Status of MTA Capital Program Funding**

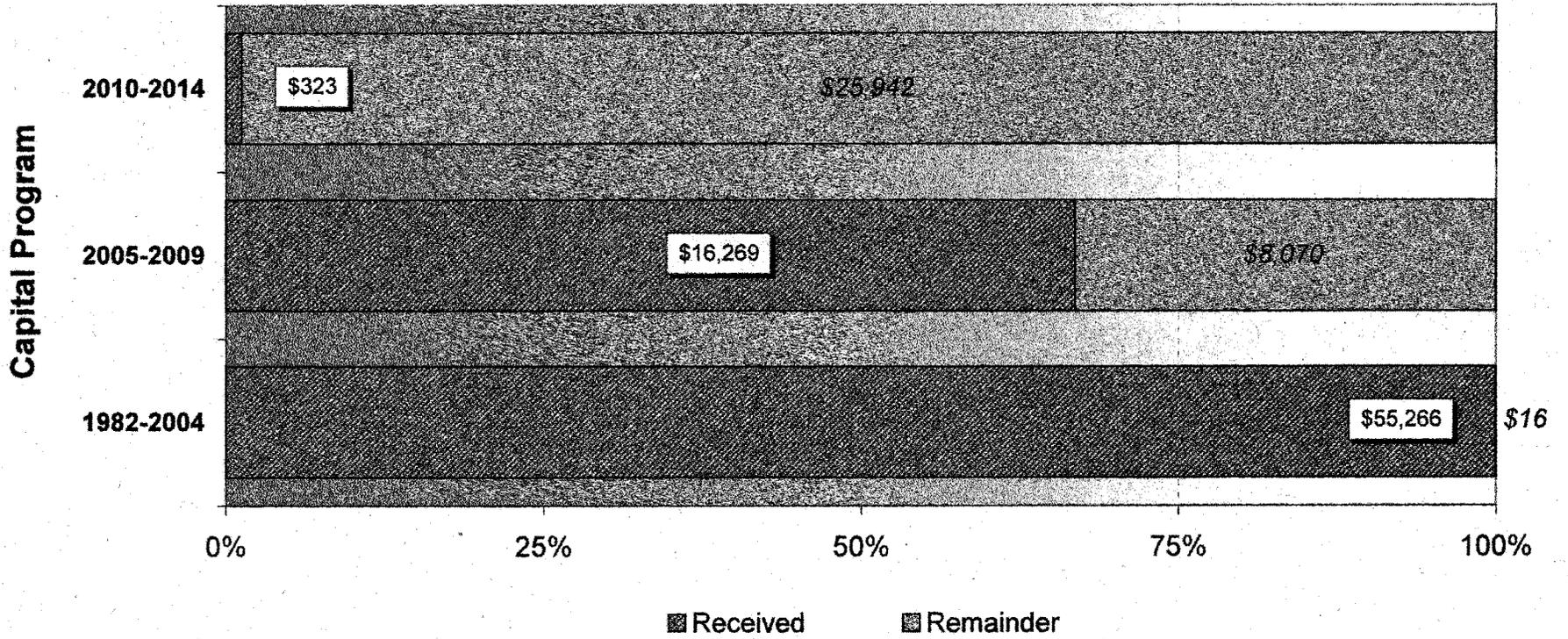
2 - 10



**Metropolitan Transportation Authority**

# Capital Funding (November 30, 2010)

\$ in millions



## Capital Funding Detail (November 30, 2010)

\$ in millions

### 2005-2009 Program

Federal Formula and Flexible Funds  
 Federal New Start  
 Federal Security  
 Federal Other  
 Federal ARRA - Stimulus  
 City of New York  
 City #7 Line Extension Funds  
 MTA Bus Federal and City Match  
 Asset Sales and Program Income  
 State Transportation Bond Act  
 MTA Bonds  
 B&T Bonds  
 Bonds from New Sources  
 Other (Including Operating to Capital)

	Funding Plan	Receipts		
	Current	Receipts thru September	This month	Received to date
	\$5,207	\$5,190	-	\$5,190
	3,286	1,483	-	1,483
	342	222	-	222
	7	7	-	7
	654	654	-	654
	411	411	-	411
	2,100	986	17	1,003
	135	107	-	107
	1,062	371	-	371
	1,450	480	-	480
	3,243	3,039	-	3,039
	1,262	846	-	846
	5,072	2,270	105	2,375
	108	79	-	79
<b>Total</b>	<b>\$24,338</b>	<b>\$16,147</b>	<b>\$122</b>	<b>\$16,269</b>

### 2010-2014 Program

Federal Formula and Flexible Funds  
 Federal Other  
 Federal Security  
 City Capital Funds  
 MTA Bus Federal and City Match  
 MTA Bonds (Payroll Mobility Tax)  
 B&T Bonds  
 Other (Including Operating to Capital)

	Funding Plan	Receipts		
	Current	Receipts thru September	This month	Received to date
	\$6,415	\$232	-	\$232
	11	11	-	11
	225	-	-	-
	500	40	40	80
	160	-	-	-
	6,000	-	-	-
	2,453	-	-	-
	589	-	-	-
<b>Total</b>	<b>\$26,265</b>	<b>\$283</b>	<b>\$40</b>	<b>\$323</b>

*Future State and Local Funding*

# Signals and Systems Division

**Mark Bienstock, P.E.**

**Program Manager**

**December 2010**

**Capital Program Oversight Committee**

# SONET/ATM-A Project Overview

## Overall Status

Item	Comments
Schedule	<ul style="list-style-type: none"> <li>• Achieved Substantial Completion on August 16, 2010.</li> <li>• Closeout forecasted for February 2011 (on-schedule)</li> </ul>
Cost	A budget modification is in circulation for an additional \$1.8M for EFA and TA Labor to address project overruns due to schedule delays and to cover the remaining activities through closeout.

3-2

## Highlights

### Progress

- The SONET Network is in Beneficial Use
- All Station Branch Loops in Beneficial Use

### 90 Day Look Ahead

- Project on schedule for 1<sup>st</sup> quarter 2011 Closeout

# SONET/ATM-A Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 <b>Green</b>	Closeout	February 2011	None. No critical issues.

3-3

### Legend

	Red	Significant impacts with potential impacts on Revenue Service Date, Cost, or Customer Benefit Milestones
	Yellow	Impacts which can lead to cost increases or schedule delays on individual milestones or contracts.
	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.

# ATM-B Project Overview

## Overall Status

Item	Comments
Schedule	<ul style="list-style-type: none"> <li>• Risk informed Substantial Completion Forecast is December 2011</li> <li>• Addressing communication room availability and environmental issues</li> </ul>
Cost	<ul style="list-style-type: none"> <li>• NYCT is evaluating the current budget to determine if a budget modification will be needed.</li> </ul>

34

## Highlights

### Progress

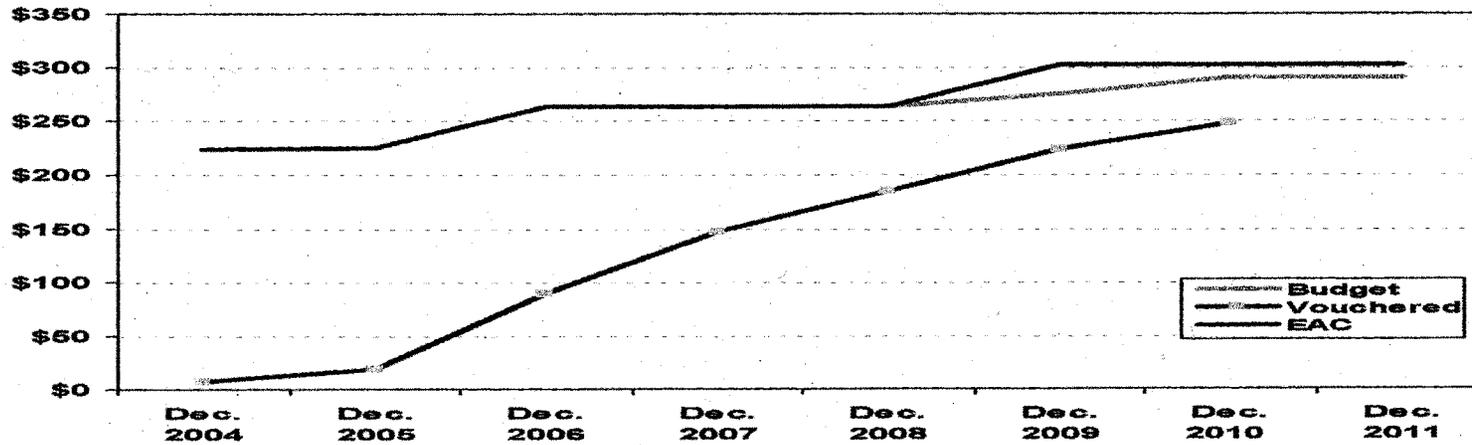
- 15 out of the 52 Station Branch Loops are ready for acceptance testing.
- Network Management System is 90% tested.

### 90 Day Look Ahead

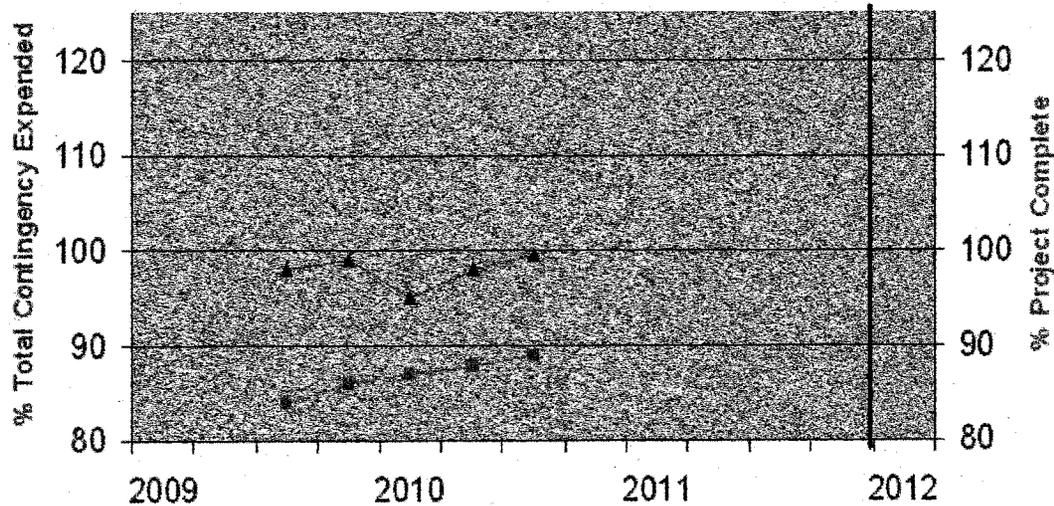
- Continue Station Branch Loop testing.
- Begin transition to Network Management System operation.
- Achieve Beneficial Use for Security Communication Circuits.

# ATM-B Project Cost & Schedule Performance

## Total Project - Actual vs. Baseline Plan



## 3rd Party Contingency Drawdown Analysis



3-5

## ATM-B Critical Milestones and Issues

Status	Activity	Date Needed	Issues
Yellow	Construction	February 2011	NYCT is negotiating a settlement for an extension of time / impact cost claim filed by Contractor.
Yellow	Construction	December 2011	NYCT is continuing to address communication room environmental issues which may impact commissioning of certain branch loops.
Yellow	Construction	December 2011	Beneficial Use requests for the first 2 Security Communication Circuits are in circulation.

3-6

	Red	Significant impacts with potential impacts on Revenue Service Date, Cost, or Customer Benefit Milestones
	Yellow	Impacts which can lead to cost increases or schedule delays on individual milestones or contracts.
	Green	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.

**December 2010**

**MCKISSACK+DELCAN**

MTA Independent Engineer

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**IEC's Supplementary Report: ATM-B**

**Schedule Performance:** The IEC substantially agrees with the risk-informed substantial completion date of December 2011.

**Budget Performance:** The IEC agrees that the current EAC will need to be increased with a budget modification that is currently under review.

**Highlights and Critical Milestones:** The IEC substantially agrees with the issues noted. The DWDM milestone comment does not mention that the Beneficial Use date has slipped several months since the last report.

**All-Agency Evaluation Findings:** The Overall Contractor Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with IEC's observation of project performance during this reporting period.

## PA/CIS Project Overview

### Overall Status

Item	Comments
Schedule	<ul style="list-style-type: none"> <li>• Project is on pace to place 100 stations in service by the end of 2010.               <ul style="list-style-type: none"> <li>❖ 25 stations more the target.</li> </ul> </li> <li>• Risk Informed Substantial Completion is forecast for the end of the 2<sup>nd</sup> quarter 2011.</li> </ul>
Cost	<ul style="list-style-type: none"> <li>• A budget modification is being prepared for an additional \$23M to address schedule delays and cover additional work including Multicasting, maintenance support, training facilities and support costs.</li> </ul>

3-8

### Highlights

#### Progress

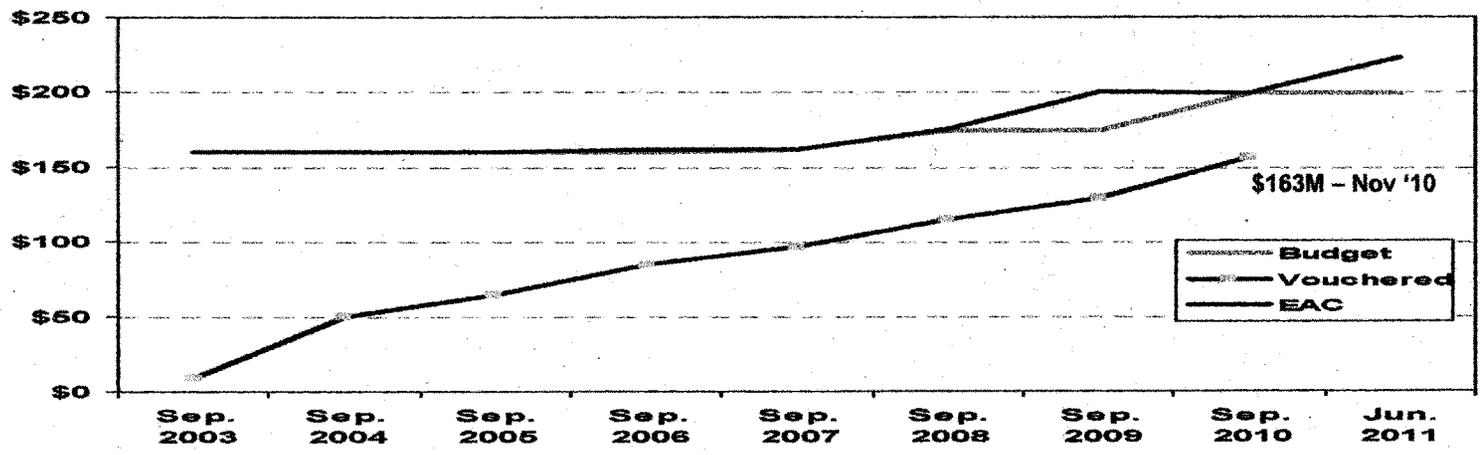
- 98 stations have been placed in service
- Stage 3 Software Factory Acceptance Testing underway
- Scalability testing successfully completed – allows expansion to 550 stations

#### 90 Day Look Ahead

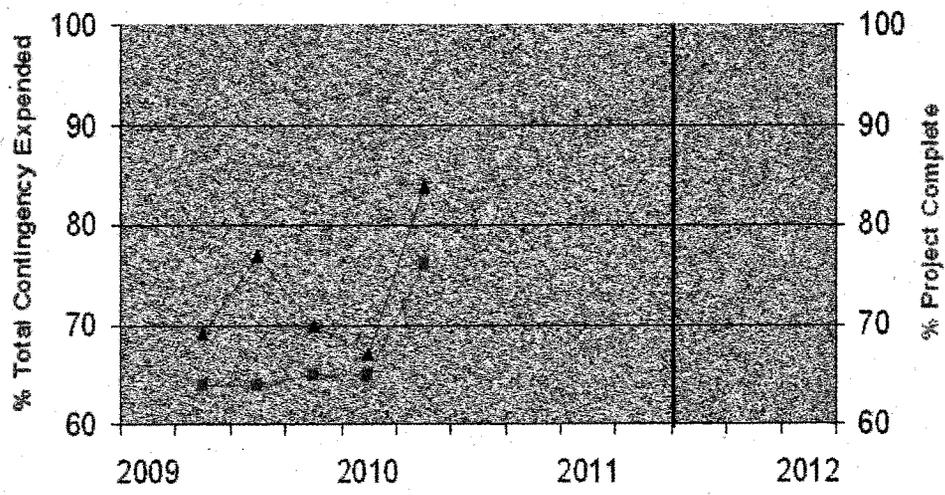
- Place additional stations in service
- Complete Factory Acceptance Testing for Stage 3 software

# PA/CIS Cost & Schedule Performance

## Total Project - Actual vs. Baseline Plan



## 3rd Party Contingency Drawdown Analysis



6-9

## PA/CIS Critical Milestones and Issues

<b>Status</b>	<b>Activity</b>	<b>Date Needed</b>	<b>Issues</b>
<b>Yellow</b>	<b>Construction</b>	<b>June 2011</b>	NYCT is working with Contractor to address resource issues which have impacted Substantial Completion by 3 months.
<b>Yellow</b>	<b>Construction</b>	<b>March 2011</b>	90 day Reliability, Availability, & Maintainability (RAM) period to begin following last station in-service.

3-10

	<b>Red</b>	Significant impacts with potential impacts on Revenue Service Date, Cost, or Customer Benefit Milestones
	<b>Yellow</b>	Impacts which can lead to cost increases or schedule delays on individual milestones or contracts.
	<b>Green</b>	No Near Term Impact for Design, Procurement & Construction. Successful management of major activity to stay on schedule or budget.

**December 2010**

MCKISSACK+DELCAN  
MTA Independent Engineer

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**IEC's Supplementary Report: PACIS**

***Schedule Performance:*** The IEC substantially agrees that the project will meet the substantial completion date of second quarter 2011.

***Budget Performance:*** The IEC agrees with the project budget modification planned.

***Critical Milestones and Issues:*** The project has accurately identified the progress achieved and forecast noted.

***All-Agency Evaluation Findings:*** The Overall Contractor Performance rating for the current All-Agency Contractor Evaluation (ACE) report for this project is consistent with IEC's observation of project performance during this reporting period.

**Performance Indicator Report (Traffic Light Report)**

**Dec-10**

**MCKISSACK+DELCAN**  
MTA Independent Engineer

Agency - Project Title	Phase	EAC (\$M)	% Complete	Contingency Index	▲ ▼	Cost Index	▲ ▼	Schedule Variance (Months)	▲ ▼	Traffic Light
<b>NYC Transit - Signal Modernization</b>										
2 Interlockings: Union Tpk & 71st Ave. /QBL (S32738)	Design	11.0	95	NA	—	0.00	—	4	▲	●
1 Interlocking : Roosevelt Ave./QBL (S32749) Note project to be coordinated with S32738.	Design	0.8	92	NA	—	0.00	—	2	▲	●
Modernization of 34th & 6th Ave Interlocking (S32738).	Design	7.2	2	NA	—	1.00	—	0	—	●
Modernization of W4th & 6th Ave Interlocking (S32765).	Design	10.3	2	NA	—	1.00	—	0	—	●
Church Avenue Interlocking - Culver Line (S32742)	Construction	210.6	2	0.00	—	0.00	—	0	—	●
East 180th Street Yard and Interlocking: White Plains Road Phase 3 (S32725)	Construction	299.8	79	0.93	▲	1.07	▲	0	—	●
Circuit Breaker House E. 180th Street (P36408)	Construction	14.4	90	0.00	—	0.00	—	0	—	●
Corona Yard (S32726)	Construction	113.6	96	1.02	▲	1.11	—	1	▲	●
5th Avenue & Lexington Avenue Interlockings	Construction	142.5	40	NA	—	1.00	—	0	—	●
<b>NYC Transit - Communications Network Systems</b>										
VHF Radio Systems Upgrage Phase 1 (W32686)	Procurement	313.9	95	NA	—	NA	—	0	—	●
Police Radio System (W32622)	Construction	141.0	99	0.00	—	1.00	—	0	—	●

Cost Index = Agency EAC/Current Approved Budget  
 Schedule Variance = Number of months of delay since last Performance Indicator Report  
 Contingency Index = % Contingency used / % Project Complete

Notes: "Contingency used" includes expended and pending contingency  
 Contingency index tracking (▲ ▼) will not start until the project has reached 50% completion

▲ = Index increase (condition worsening)  
 ▼ = Index decrease (condition improving)

Only projects with total value of \$5M or more are reported.

**Projects in Construction:**

- No indices over 110% and no index movement greater than 10%
- Cost Index: An Increase of 10% or more since last Performance Indicator Report
- Schedule: An increase of 3 months or more since last Performance Indicator Report

**Projects in Design:**

- No indices over 115% and no index movement greater than 15%
- Cost Index: An increase of 15% or more since last Performance Indicator Report
- Schedule: An Increase of 3 months or more since last Performance Indicator Report

**Rehabilitation 2 Interlockings:  
Union Turnpike and 71st Avenue,  
Queens Blvd Line****Current Budget: \$11.0M  
Design Completion Date: 12/31/09A  
Phase Design: 95%  
Forecast Award Date: 3/30/12****Project Description:**

This project will modernize and improve the reliability of the Union Turnpike and 71st Avenue Interlockings located on the IND Queens Boulevard (QBL) Line in Queens. The project will include replacement of the original electro-mechanical wayside interlocking and local tower equipment with new conventional relay-based equipment, construction of new relay rooms, modernization of the wayside signal equipment i.e. signals, cables, stop machines, and other appurtenances necessary for the future implementation of CBTC on the QBL Line.

**Schedule / Cost Change:**

Due to the uncertainty of the 2012-14 Capital Program and track access availability, the design of this project was declared complete in December 2009 and would be re-opened to complete Value Engineering, Risk Assessment, Constructability, force accounts and any design changes required to award the project.

Due to higher than anticipated cost of conventional signal work in the recently awarded Flushing CBTC project, Signals was directed to redesign the project into two contracts: an IFB for Engineering / Furnishing Signal Equipment and a RFP for Signal Equipment Installation.

This required extensive repackaging of the design drawings and specifications. This had a significant impact on the design budget, greater than originally anticipated for the restart.

Due to uncertainty of 2012-14 funding, the award of this project has been delayed from the 1st quarter 2012 to the 2nd quarter. However, there are several Line Equipment and Station projects piggy-backing on this project and its continued delay or re-sequencing of GOs will have a negative impact on their TA Labor budgets.

**Problems:**

**Budget:** Design budget has overrun by approx. \$200,000.

**Schedule:** Award of the project has been delayed 4 months from 1<sup>st</sup> quarter 2012 to 2<sup>nd</sup> quarter 2012.

**What is Being Done:**

**Budget:** A Budget Modification Staff Summary Sheet (BMSS) is being prepared to address the additional design needs (approx. \$2.5M) for this project. This will include the added re-design costs, plus the RFP and IFB procurement related costs to award the two contracts.

**Schedule:** There is no change in the procurement schedule; however, permission to prepare / submit a Request to Advertise (RTA) for the RFP and IFB contracts is pending MTA approval.

**IEC COMMENT:****Budget and Schedule Performance:**

The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the agency.

<b>Modernize Corona Yard Signals, Flushing Line</b>	<b>Current Budget: \$102.1M</b> <b>Substantial Completion Date: 12/2010</b> <b>Percent Complete: 96%</b>
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**Project Description:**

This project is the third phase of the Corona Yard reconfiguration. This project will install and equip seven new yard tracks, build a new master tower and relay room, upgrade the signal power to 60 Hz from 25 Hz, and reconstruct a new circuit breaker house. The project will make the yard CBTC ready to accept the new technology to be installed on the Flushing Line. Project was awarded in September 2006 and is currently 96% complete. Substantial completion forecast is December 2010 and closeout in July 2011.

**Schedule / Cost Change:**

The project remains on schedule for Substantial Completion in December 2010.

The approved AWO's are 92% of the Project Contingency budget. As the project is 96% complete, and the Contingency Index is 1.02, it is anticipated there are sufficient funds to complete the project.

There are significant shortfalls in the EFA and TA Labor budgets. Based on the most recently completed force account estimate, an additional \$7.1 million is needed for In-house Construction Administration (EFA), including \$5.0 million to cover an existing overrun and \$2.1 million to support construction activities through the closeout of the contract. The overrun occurred due to numerous design coordination issues between different disciplines and AWOs, which required additional design, review of shop drawings, inspection, testing and acceptance. Also, expanded Commissioning requirements and procedures resulted in additional support from Commissioning and other support groups.

An additional \$4.5 million is needed for TA Labor to cover the existing overrun of \$3.9 million and \$0.6 million to support the remaining work. The overrun occurred due to changes in system wide flagging rules, specified material (hardwood ties) being difficult to procure and tightening of safety (flagging) requirements in constructing new tracks and the signal tower adjacent to the yard leads. Also, the pre-award flagging plan did not include sufficient flaggers to cross the tracks into the new track construction area.

**Problems:**

**Budget:** There is an EFA and TA Labor projected need of \$11.6 million

**What is Being Done:**

**Budget:** A Budget Modification Staff Summary Sheet (BMSS) has been prepared to address the additional EFA and TA Labor needs (approx. \$11.6 million). WAR Requests have been submitted to the MTA.

**IEC COMMENT:**

**Budget and Schedule Performance:**

The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the agency.