



**Metropolitan Transportation Authority**

# **Capital Program Oversight Committee Meeting**

## **December 2011**

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### **Committee Members**

A. Saul, Chair

J. Blair

A. Cappelli

F. Ferrer

M. Lebow

S. Metzger

C. Moerdler

M. Page

M. Pally

J. Sedore

V. Tessitore

C. Wortendyke



## MEETING AGENDA

### MTA CPOC COMMITTEE

December 19, 2011 – 2:00 pm

347 Madison Avenue  
Fifth Floor Board Room  
New York, NY

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2. COMMITTEE WORK PLAN	TAB 2
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**MINUTES OF MEETING**  
**MTA CAPITAL PROGRAM OVERSIGHT COMMITTEE**  
**November 14, 2011**  
**New York, New York**  
**1:45 P.M.**

MTA CPOC members present:

Hon. Andrew Saul, Chairman  
Hon. James Blair  
Hon. Allen Cappelli  
Hon. Fernando Ferrer  
Hon. Mark Lebow  
Hon. Susan Metzger  
Hon. Charles Moerdler  
Hon. Mark Page  
Hon. Mitchell Pally  
Hon. James Sedore  
Hon. Carl Wortendyke

MTA CPOC members not present:

Hon. Vincent Tessitore, Jr.

MTA Board members present.

Hon. Andrew Albert

MTA staff present:

Michael Fucilli  
Michael Garner  
Joshua Goldwitz  
Linda Kleinbaum  
Ron Saporita  
Michele Woods

LIRR staff present:

John Swanson

MNR staff present:

John Wagner

NYCT staff present:

Branko Kleva  
Joseph Leader  
Bill Montanile  
Fred Smith

\* \* \*

Chairman Saul called the November 14, 2011 meeting of the Capital Program Oversight Committee to order at 1:50 P.M.

**Public Comments Period**

There were no public speakers in the public comments portion of the meeting.

## **Meeting Minutes**

Upon motion duly made and seconded, the CPOC members approved the minutes to the previous meeting held on October 24, 2011.

## **Committee Work Plan**

Ms Kleinbaum stated that there were changes to the Work Plan including moving the mega-projects from December to February to allow for more time to assess the re-baselining of East Side Access (ESA). Additional time is also required to prepare substantive assessments for Positive Train Control (PTC) which has been postponed until June. B&T's All-Electronic Tolling (AET) Project presentation has also been postponed. The Communications Based Train Control (CBTC) has been postponed until January 2013 to allow for data for one year of operations. Ms. Kleinbaum noted that a full agenda remains for the upcoming months.

## **New York City Transit – Stations Program**

William Montanile and Branko Kleva provided an update on NYCT's Stations Program. Mr. Montanile noted that the Component Program was in its second year and that there were 126 Stations in the Program, with construction planned for these stations during the 2010-14 time periods. Currently, 3 ADA and 5 Renewal projects are planned for construction in 2011. Construction is forecasted for 10 additional renewal and 5 ADA projects in 2012. Thirteen renewal projects are slated for construction in 2013/14 and 9 rehabilitation projects are scheduled for construction in 2014. Mr. Montanile stated that there were 63 locations, with forecasted construction completion dates for 2011, including recently completed projects such as Jay Street-Metro Tech, the Columbus Circle Complex and stations within the Component Replacement Program such as platform edge replacements at 3 locations along the Eastern Parkway line. In response to a Board question, Fred Smith noted that initial projects within the Component Replacement Program generally contained a singular replacement such as stairwells. Projects within the 2012, 2013 and 2014 Program will be more extensive with multiple component replacements. It was mentioned by Ron Saporita that the SBMP Stairwell projects managed by Seymour Portes and his staff were noteworthy in success. Branko Kleva discussed the partnership between the capital and operating divisions. The Operations Division targets those stations that have undergone physical improvement, such as component replacement, to preserve investments. In 2011, 7 stations were targeted and in 2012, 11 stations will be targeted. The Operating/Maintenance Division is like-wise committed to preserving assets for those stations renewed and rehabilitated. This strategic approach began in 2010 with 19 stations and plans are to expand up to 42 stations at the end of 2011 and 60 new stations in 2012. Board discussion focused on the level of inspections/maintenance deployed to preserve investments to ensure an adequate level of service particularly for elevators and escalators. The Board members were informed that daily inspections occur and all required improvements are duly noted, with safety needs being addressed immediately. Daily inspections also include elevator and escalator operations by staff with special expertise.

## **MTA Track Program Review**

Last February a presentation to the Board by agency staff described a new strategic approach to track investments. At that time it was noted that agency track program spending varied widely due to significant differences in infrastructure needs and operational constraints. Since then, the agencies have been working cooperatively to obtain efficiencies including increasing track access, optimizing asset renewals and minimizing support services and work rule initiatives. Efforts to date have resulted in savings of approximately \$56M in 2011, with the potential for \$81M, on average, for the 2012-14 time periods. Each of the agency representatives provided examples of savings initiatives. As an example, Joseph Leader stated that NYCT has realized 42% more productive time with reduced set-up and takedown times and longer G.O. windows. John Swanson stated that LIRR has adjusted its work start times and scheduled multiple outages to improve productivity while John Wagner indicated that MNR has also expanded its track access work window to increase productivity. Board discussion focused on the feasibility of night-time track work which is challenging to implement due to union rules (increased costs) and the

potential disruption to residential communities. A Board member request was made to evaluate the cost of the night-time track work at the LIRR. Follow-up information will be provided to the Board. It was also suggested that MNR evaluate collective bargaining agreements to explore potential night-time work. MNR staff indicated that this was being undertaken. It was noted that the agencies will continue to explore other new initiatives such as expanding the application of "Green Rock" and modifying work rules. The agencies will provide periodic progress updates to CPOC on their action plans.

### **Capital Program Management Review**

Michael Fucilli and Michele Woods provided an overview of a management review conducted by MTA Audit to evaluate the 2005-09 Capital Program area, with a focus on future efficiencies. It was determined that both construction and design costs were within industry standards. One of the areas found to require additional study is overhead rates, with a need to rationalize the disparate rates, amongst the agencies. This baseline information is a necessary input to identifying efficiencies and making comparisons about costs internally and with third-party vendors. Next steps were identified including NYCT's Task Force, chaired by Tom Prendergast, with the goal of reviewing all overhead rates including an analysis of all indirect staffing and work, by Audit and the Independent Engineering Consultant in partnership with the agencies to recommend a consistent calculation for overhead rates. MTA Executive Management/Board discussion focused on the recognition of the need to obtain capital program efficiencies while at the same time pursuing approval for the funding of the current program's out-years. Follow-up information will be provided regarding Board questions about overhead rates for operating staff and staff costs as a percentage of the Capital Program budget.

### **Annual Review of CPOC Charter**

Linda Kleinbaum noted that the CPOC Charter was contained in the book for Board member review. Ms. Kleinbaum Indicated that the Charter remained unchanged from last year.

### **Capital Program Status**

In the interest of time, Ms Kleinbaum requested Board Members to review the Commitments and Completions and direct any questions to her.

### **Executive Session**

Upon motion duly made and seconded, Chairman Saul adjourned the public CPOC meeting at 2:50 PM to go into Executive Session.

### **Adjournment**

Upon motion duly made and seconded, Chairman Saul adjourned the Executive Session, reconvened the public session and then immediately adjourned the November 14, 2011 meeting of the MTA Capital Program Oversight Committee.

Respectfully submitted,  
Iris Berman  
Office of Construction Oversight



## **2012 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

January 2012

*Risk-Based Monitoring*

- NYC Transit Report on Signals/Comms
  - PA/CIS; SONET; Flushing CBTC
- Red Light project follow-up reports (if needed)

*Program Priorities*

- Quarterly Update on Minority, Women and Disadvantaged Business Participation

February 2012

*Risk-Based Monitoring*

- Quarterly MTA Capital Construction Report on Mega Projects
- SAS 96<sup>th</sup> Street Station Finishes & MEP Systems Risk Assessment
- Fulton Street Transit Center Risk Update
- NYCT Report on Subway Car Procurement
- Red Light project follow-up reports (if needed)

March 2012

*Risk-Based Monitoring*

- LIRR ESA Readiness Projects
- Quarterly Traffic Light Report and Red Light project follow-up reports (if needed)

*Strategic Reviews*

- Interplay between ESA Operating Plan & Capital Investments

April 2012

*Risk-Based Monitoring*

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

*Program Priorities*

- Quarterly update on Minority, Women & Disadvantaged Business Participation

May 2012

*Risk-Based Monitoring*

- Quarterly MTA Capital Construction Report on Mega Projects
- ESA Systems Packages Risk Assessment
- NYC Transit Stations Program
- Red Light project follow-up reports (if needed)

## June 2012

### *Risk-Based Monitoring*

- LIRR/MNR PTC Risk Assessment
- VN Bridge Deck Replacement Risk Assessment
- Quarterly Traffic Light Report and Red Light project follow-up reports (if needed)

### *Strategic Reviews*

- B&T AET Update

## July 2012

### *Risk-Based Monitoring*

- NYC Transit Report on Signals/Comms
  - PA/CIS; SONET; Flushing CBTC
- Red Light project follow-up reports (if needed)

### *Program Priorities*

- Quarterly update on Minority, Women & Disadvantaged Business Participation

## August 2012

No CPOC

## September 2012

### *Risk-Based Monitoring*

- Quarterly MTA Capital Construction Report on Mega Projects
- SAS 86<sup>th</sup> Street Station Finishes & MEP Systems Risk Assessment
- Quarterly Traffic Light Report and Red Light project follow-up reports (if needed)

## October 2012

### *Risk-Based Monitoring*

- Interagency Rolling Stock Update
  - LIRR/MNR Report on M-9 Procurement
  - NYCT Report on Subway Car Procurement
  - Update of the Bus Program
- Red Light project follow-up reports (if needed)

### *Strategic Reviews*

- Update on Bus Customer Information Systems

### *Program Priorities*

- Quarterly Update on Minority, Women and Disadvantaged Business Participation

## November 2012

Annual Review of CPOC Charter

### *Risk-Based Monitoring*

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

## December 2012

### *Risk-Based Monitoring*

- Quarterly MTA Capital Construction Report on Mega Projects
- NYC Transit Stations Program
- Quarterly Traffic Light Report and Red Light project follow-up reports (if needed)



# New Fare Payment Systems Update

Presentation to  
Capital Program Oversight Committee  
December 19, 2011

2-1

# Agenda

- Goals
- Concept
- Challenges
- Moving forward

2-2



# MTA goals

- Lower cost of revenue collection
- Integrate fare payment across modes & agencies
- Substantially reduce cash use
- Speed up performance at turnstiles & fareboxes
  - Speed up bus boarding and reduce dwell times
- Future-proof

2-3



# Fare payment concept

- Account-based, not card-based
  - More like E-Z Pass, less like MetroCard
- Account may reside with bank, MTA, mobile phone network or other 3<sup>rd</sup> party provider
- For entry, customer will tap, not swipe, at readers on turnstiles and fare-boxes
- Tap contactless credit/debit card, prepaid card, phone or MTA issued Card

2-4



# Fare payment concept (cont.)

- Encourage customers to self-serve on-line, at ATMs and kiosks, and via widespread external network of retail merchants
- Leverage existing payment industry infrastructure, products and services
- Use relatively inexpensive and commercially available off-the-shelf-hardware and software
- Applicable to all modes and agencies
  - All agencies involved in concept development
  - All agencies have or will have pilots

2-5

# Commuter railroad pilots

- Concept for railroads is similar: Open standard based retail merchant model with backend account
- One pilot each for LIRR and MNR
  - On-board and off-board payments
- Pilots include testing handheld validation devices
- Pilots have commenced for LIRR (with Nokia)
- MNR is in the planning phase for their pilot (possibly with Masabi)

2-6



# Fare payment challenges

- Subway communications networks
- Managing commercial relationship with payments industry
- MTA-issued card & reload network
- Transition from MetroCard
  - Customers
  - Employees
- Effective communication

2-7

# Progress over the last 6 months

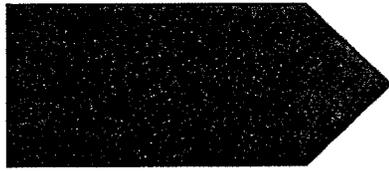
2-8

	<b><u>Task</u></b>	<b><u>Status</u></b>	<b><u>Completion date</u></b>
1	Develop detailed requirements for MTA-issued card and reload network	In progress	1Q 2012
2	Develop Project Plan: requirements, cost estimate, schedule, procurement strategy	In progress	TBD
3	Develop payments industry negotiation strategy	Complete	
4	Finalize subway communications networks plan	In progress	TBD
5	Select Design Consultant	RFP ready for issue	1Q 2012
6	Install hardware on Staten Island buses	Complete	

# Moving forward: Next 6 months

- Complete development of detailed requirements for MTA-issued card and reload network
- Confirm Project Plan: requirements, cost estimate, schedule, procurement strategy (gate review)
- Finalize subway communications networks plan
- Select Design Consultant
- Begin installing hardware on buses in other boroughs

2-9



# **MTACC Quarterly Progress Report to CPOC**

**December 19, 2011**

3-1



# Fulton Street Transit Center



## Project Overview

### Overall Status (as per 2009 Re-Baseline Plan)

Item	Comments
Schedule	Overall project on schedule for June 2014
Cost	Trending below current budget of \$1.4 billion

33

### Highlights

#### Progress

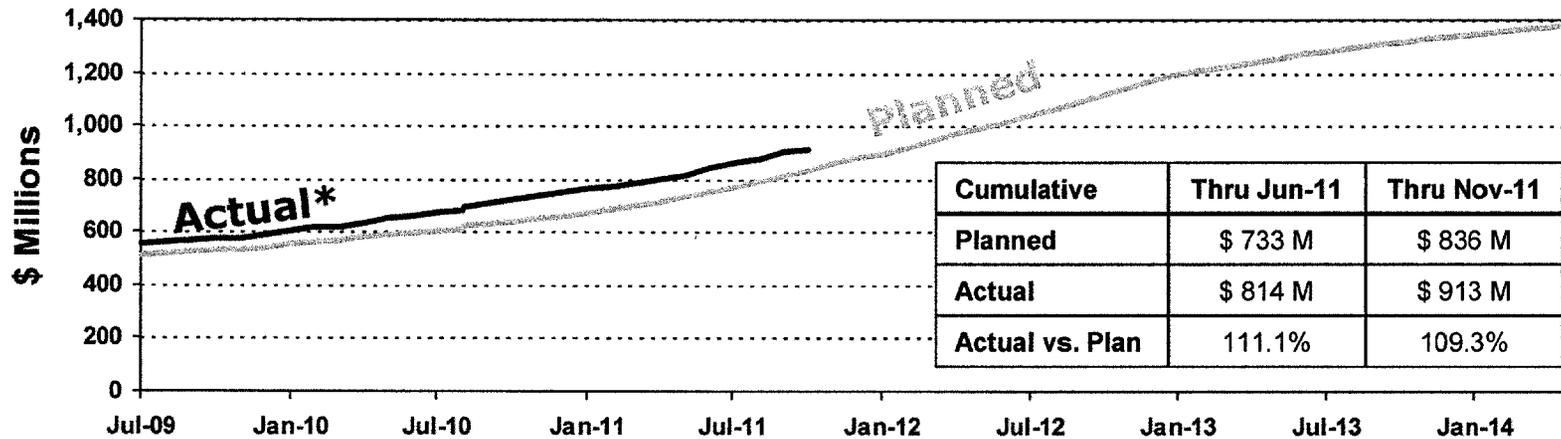
- Opened 135 William Street Entrance
- Opened Cortlandt Street R Station Southbound Platform
- Opened A/C to 4/5 transfer
- Tower crane dismantled in November to allow the next phase of the A/C Mezzanine work to proceed
- Completed Corbin Building exterior cleaning
- Partial opening of the A/C Mezzanine and completion of mini-piles as reconfiguration work progresses

#### 90 Day Look Ahead

- Start installation of the Transit Center glass cladding
- Delivery of Corbin Building escalators
- Energize permanent power for the Transit Center, Corbin Building, and Dey St Concourse
- Install floor tile in the Dey St Concourse

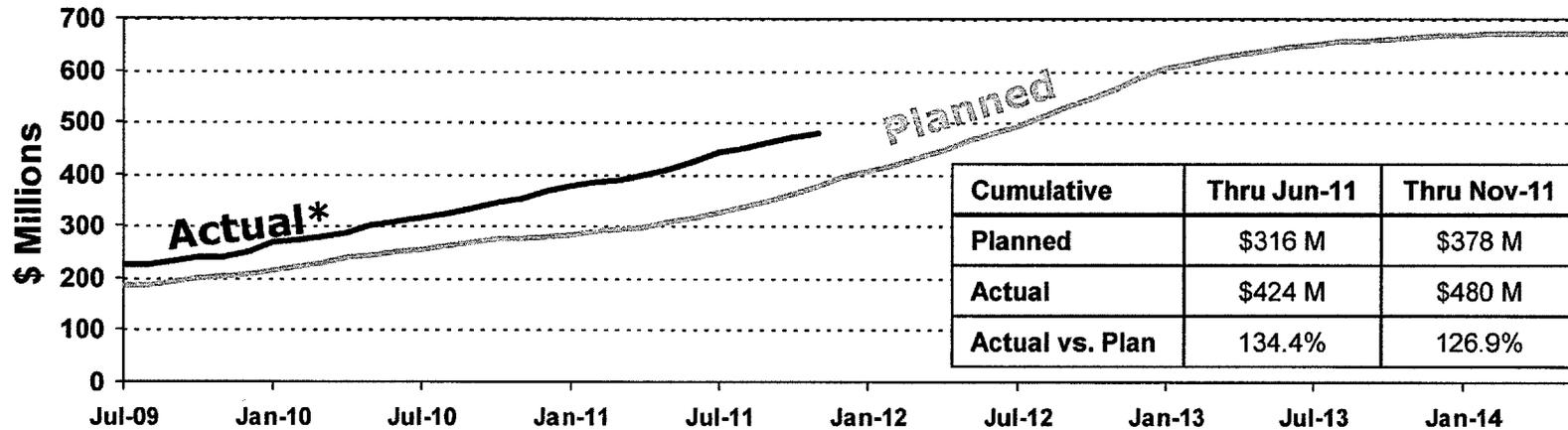
## Cost & Schedule Performance

### Total Project - Actual vs. May-2009 Re-Baseline Plan



\* Actual represents expended; does not include retainage.

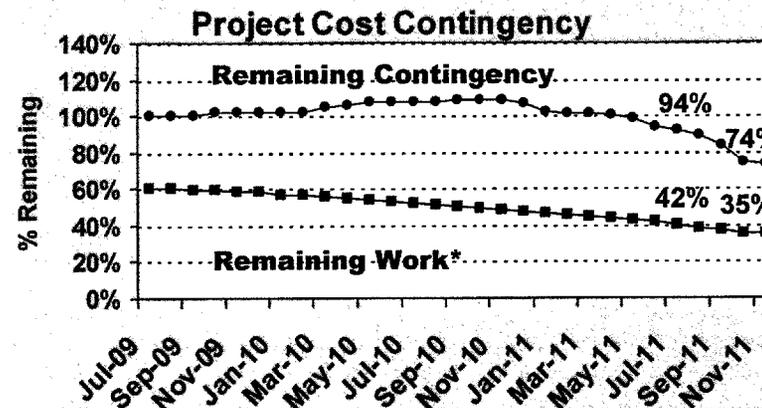
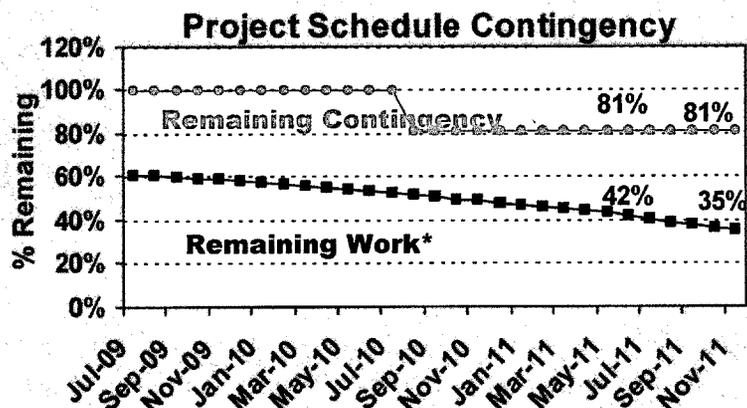
### 3<sup>rd</sup> Party Construction - Actual vs. May-2009 Re-Baseline Plan



\* Actual represents expended; does not include retainage.

## Cost & Schedule Contingency Status

3-6



\* Remaining work is from start of project, which was re-baselined in May 2009.

\* Remaining work is from start of project, which was re-baselined in May 2009.

- May 2009 baseline schedule contingency: 180 days
- Current schedule contingency is 146 days
- The schedule contingency impact of enhancement work (see issues) is still under review and will not be included in this value until MTACC completes development of detailed schedules, expected by year-end

- May 2009 baseline budget contingency: \$124 million
- Current budget contingency is \$91 million, \$26 million less than last report (\$117 million)
- Enhancement and retail development work (see issues) is estimated to cost \$35 million. Currently, \$8 million of this cost is reflected in the contingency drawdown.

## Critical Milestones and Issues

3-6

Status	Activity	Date Needed	Issues
Yellow	<b>Design/Construction:</b> Enhance public experience and fully integrate new and emerging technology in the Transit Center Complex	Jan 2012	<p><b>Issue:</b> Transit Center design was reviewed with the objectives of creating a vibrant public space for Lower Manhattan, maximizing revenue opportunities, and integrating new technology in wayfinding, art and advertising. Design work and construction contract change order negotiations are underway.</p> <p><b>Impact:</b> The required changes can all be achieved within available schedule and budget contingency.</p> <p><b>Mitigation:</b> Detailed schedules are being developed to identify key milestone dates and interfaces. Coordination plans being developed with contractors to ensure no conflicts with critical path work.</p>
Green	<b>Customer Impacts During Construction</b> (Contract 4B A/C Mezzanine Reconfiguration)	Resolved	<p><b>Issue:</b> Adverse customer impacts during the construction phase of the A/C Mezzanine ramps and vertical circulation elements.</p> <p><b>Impact:</b> If not properly managed, customers will be inconvenienced.</p> <p><b>Mitigation:</b> With the opening of the A/C to 4/5 connection in October and the partial openings of portions of the reconfigured mezzanine, this issue is considered to have been successfully managed and will be dropped from future reports.</p>

### 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.

## Potential Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 <b>Green</b>	<b>Interface between 4F/4B Contracts</b> (Contract 4F Transit Center Building & Contract 4B A/C Mezzanine Reconfiguration)	<b>April 2012</b>	<p><b>Issue:</b> If the A/C Mezzanine Reconfiguration contractor does not complete the mini-pile installation and structural steel work by April 15, there will be delay in the 4F Transit Center Contract.</p> <p><b>Impact:</b> Delay claim by Transit Center contractor.</p> <p><b>Mitigation:</b> Accelerate the A/C Mezzanine Reconfiguration contract and negotiate a new intermediate milestone to complete the work by mid April. Negotiations are expected to be completed by the end of the year.</p>

3-7

### 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.

## Progressive Roll-out of Customer Benefits

3-8

Benefit	Status	Completion Dates Committed to Board in May 2009				
		2009	2011	2012	2013	2014
Northbound Platform R Cortlandt	√ (Nov-09)	Dec				
New 135 William Street Entrance	√ (Jul-11)		May			
New Fulton A/C to 4/5 Connection	√ (Oct-11)		Aug			
Southbound Platform R Cortlandt	√ (Sep-11)		Sep			
4/5 Fulton St Station Rehab	● Green			Jul		
New Dey St Entrance to 4/5 Fulton	● Green			Jul		
Opening of Dey Street Concourse	● Green			Nov		
New Escalator to John Street	● Green			Nov		
Corbin Restoration & First FI Retail	● Green			Dec		
Opening of A/C Mezzanine	● Green				Mar	
Opening of Transit Center Building	● Green					Jun

●	Red	Milestone not on track to meet target date
○	Yellow	Milestone trending behind schedule/Mitigation under review
●	Green	Milestone on schedule
√		Milestone achieved

## **IEC's Supplementary Report: Fulton Street Transit Center**

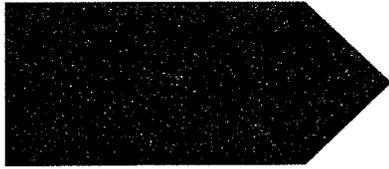
**Schedule Performance:** The IEC agrees that the project will meet the proposed completion date of June 2014. The IEC review of the schedule review being performed by MTACC when available.

*IEC Recommendation:* Work with NYCT to resource-load all commissioning activities for MTACC and NYCT projects in order to provide early confirmation of adequacy or deficiency in planned NYCT test and commissioning support.

**Budget Performance:** The IEC agrees that the project is on budget, and the remaining contingency is \$92M. FSTC is trending to be complete under budget of \$1.4B. The remaining contingency includes \$47.8M of local funds; which is available to fund the station enhancements (Mod 54). The current estimates show the cost for the enhancements is approximately \$24M, which does not include all schedule impacts.

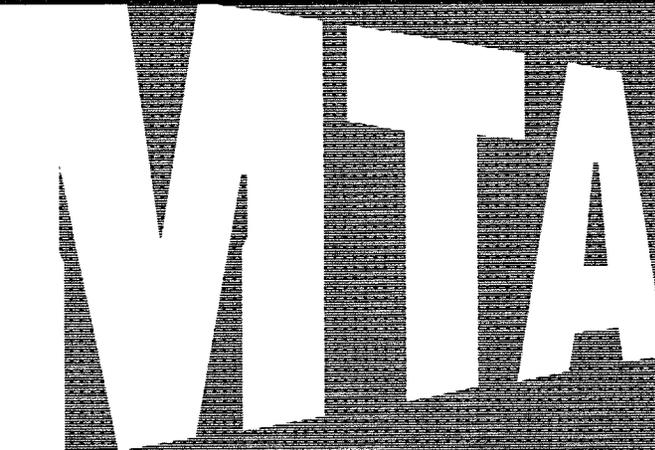
**Critical Milestones and Issues:** The IEC agrees that the critical issue in the next three months is getting the Transit Center & Station Enhancements change orders approved and initiated as related to the station enhancements.

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



# Second Avenue Subway

3-10



# Project Overview

## Overall Status (as per 2009 Re-Baseline Plan)

Item	Comments
Schedule	On schedule to meet the December 2016 revenue service date
Cost	On budget

3-11

## Highlights

### Progress

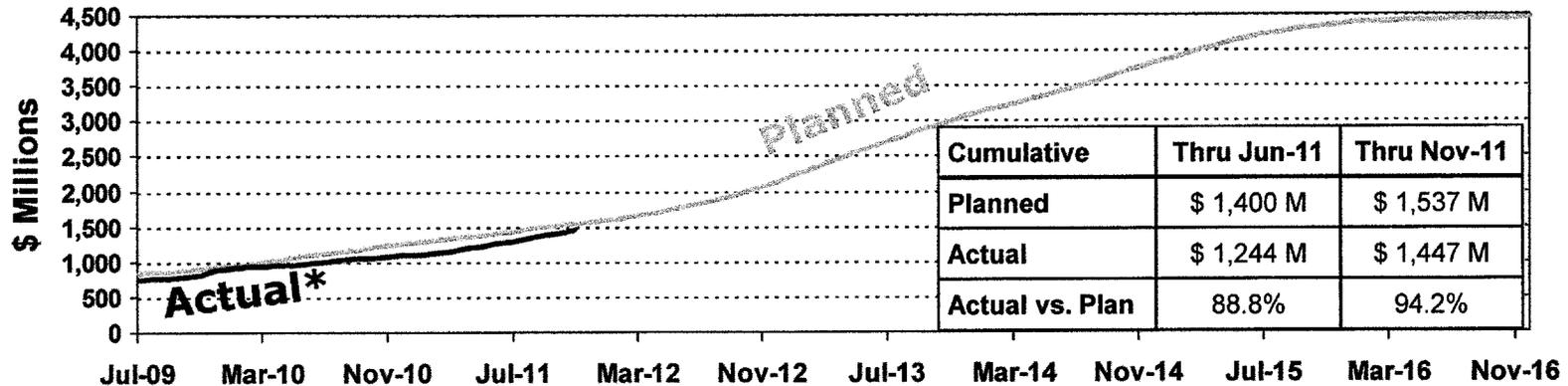
- Completed TBM mining in September 2011
- Excavation continuing on 72<sup>nd</sup> St Station Cavern, with about 40 percent completed
- Completed west side slurry wall of the 96<sup>th</sup> St Station
- Completed Open Cuts and Utility Relocation Contract at 86<sup>th</sup> St on November 16
- Awarded 86<sup>th</sup> St Station Cavern contract on August 5
- Evaluated proposals for Systems contract with recommendation for award of RFP contract at December Board Meeting
- Advertised 96<sup>th</sup> Street Station Finishes Contract December 5 (award subject to funding availability)

### 90 Day Look Ahead

- Begin east side slurry wall of the 96<sup>th</sup> Street Station
- Begin installation of the muck house enclosures at 86<sup>th</sup> Street
- Substantial completion of the Running Tunnels Contract

## Project Cost & Schedule Performance

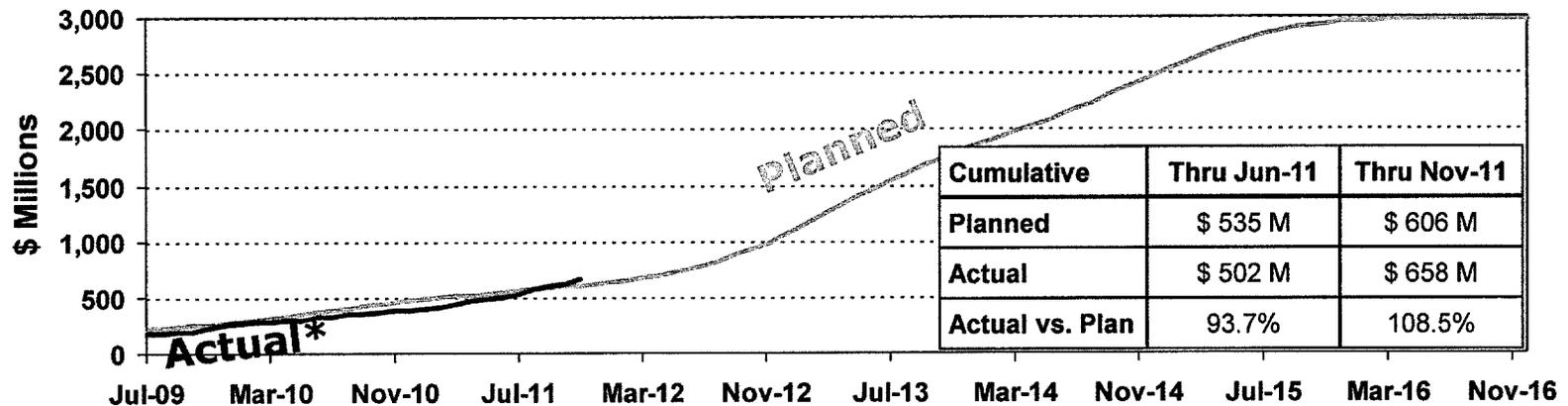
### Total Project – Actual vs. July-2009 Re-Baseline Plan



\* Actual represents expended; does not include retainage.

3-12

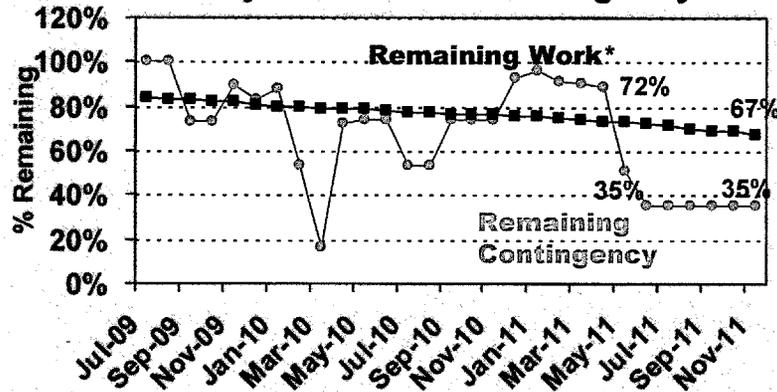
### 3<sup>rd</sup> Party Construction – Actual vs. July-2009 Re-Baseline Plan



\* Actual represents expended; does not include retainage.

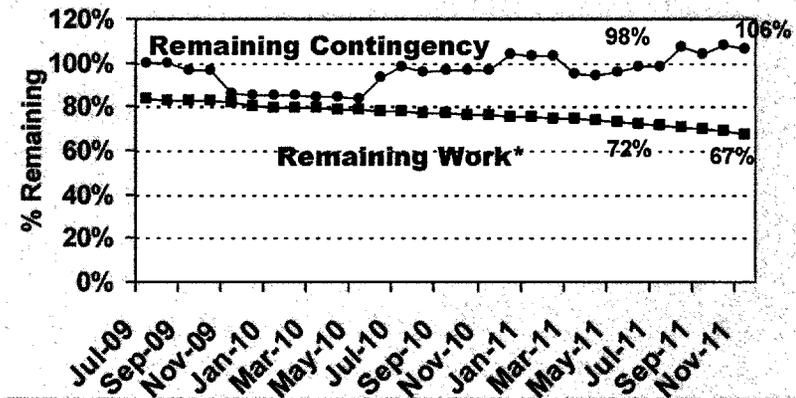
## Cost & Schedule Contingency Status

### Project Schedule Contingency



\* Remaining work is from start of project which was rebaselined in July 2009.

### Project Cost Contingency



\* Remaining work is from start of project which was rebaselined in July 2009.

3-13

- July 2009 baseline schedule contingency: 186 days
- Current schedule contingency is 66 days, the same as the prior report
- With the award of the Systems Contract, which is presented for Board approval this month, MTACC expects to increase schedule contingency
- NYCT has committed to support MTACC systems integration and commissioning based on the current schedule and budget

- July 2009 baseline budget contingency: \$322 million
  - Does not include \$189 million in design development contingency (AFI)
- Remaining budget contingency is \$342 million, an increase of \$26 million since last report. The increase is largely due to the favorable bid received for the now-awarded 86th St Station Cavern Mining contract.
  - Does not include \$55 million in design development contingency (AFI). Last reported AFI was greater because it included an allocation for the now-awarded 86th Street Structures contract and higher percentage allocations for future contracts.

## Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 <b>Green</b>	<b>Fragile Buildings</b> (multiple contracts)	<b>Resolved</b>	<p><b>Issue:</b> Fragile buildings near SAS construction sites may require remediation as construction continues. Many of the buildings have pre-existing deficiencies.</p> <p><b>Impact:</b> Temporary resident relocations and remediation, if needed, could impact cost and schedule for these contracts.</p> <p><b>Mitigation:</b> MTACC has completed building remediation work at 96th and 72nd Streets, and no work was necessary at 63rd Street. Remaining work at 86th Street is the responsibility of the cavern contractor, and is expected to be coordinated with their project schedule. None of the remaining remediation work requires tenant relocation. This issue is not expected to pose any further risk to the construction program.</p>
<b>Yellow</b>	<b>Construction Impacts at 72<sup>nd</sup> St</b> (Contract 4B)	<b>Ongoing</b>	<p><b>Issue:</b> Blasting for the 72<sup>nd</sup> Street Cavern has resulted in community concerns related to air quality (dust and smoke).</p> <p><b>Impact:</b> MTACC suspended blasting for week of November 28 to implement additional mitigations. Restrictions related to blasting activities may impact cost and schedule of contract.</p> <p><b>Mitigation:</b> Mitigations done to date include the construction of the muck houses at 72<sup>nd</sup> and 69<sup>th</sup> Streets; restrictions on how late the contractor can blast; the use of dust bosses (high pressure water spray over shaft to capture rising dust); and adjustments to the ventilation system. Additional measures that are under review include alterations to the muck houses to further contain the smoke and the timing of blasts.</p>

3-14

## Critical Milestones and Issues

Status	Activity	Date Needed	Issues
 <b>Green</b>	<b>Litigation 86<sup>th</sup> St Station</b> (Contract 5B/5C)	<b>Resolved</b>	<p><b>Issue:</b> Yorkshire Tower residents have initiated a lawsuit against the project, claiming the entrance planned for 86<sup>th</sup> St violates the Environmental Assessment (EA) that was completed on October 29, 2009.</p> <p><b>Impact:</b> If successful, this action could delay Entrance 2 work on 86<sup>th</sup> Street Cavern contract and the overall project.</p> <p><b>Mitigation:</b> The court ruled against Yorkshire's action on December 1, and the issue is closed.</p>
<b>Yellow</b>	<b>96<sup>th</sup> Street Station</b> (Contract 2A) <b>is near critical path</b>	<b>Ongoing</b>	<p><b>Issue:</b> The 96<sup>th</sup> St Station Structures contract remains near the project critical path as a result of previously reported delays. Progress continues, with the west side slurry wall completed this quarter, but delays in Con Ed work could lead to delays in the east side slurry wall.</p> <p><b>Impact:</b> Delays in east side slurry wall completion could delay overall contract completion further and consume more contract float.</p> <p><b>Mitigation:</b> MTACC has regained some contract schedule since first reporting this contract as near-critical. Currently, the project team is meeting with Con Ed to coordinate slurry wall work.</p>
 <b>Red</b>	<b>86<sup>th</sup> Street Station Cavern Schedule</b> (Contract 5B)	<b>Ongoing</b>	<p><b>Issue:</b> The 86<sup>th</sup> St Station Structures contract includes critical path work for the overall project.</p> <p><b>Impact:</b> Delay in award has resulted in the loss of four months of project schedule contingency.</p> <p><b>Mitigation:</b> MTACC has identified possible ways to recover some of the lost contingency and is reviewing them with the contractor.</p>

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## IEC's Supplementary Report: Second Avenue Subway

**Schedule Performance:** MTACC reports that the Project's Schedule Contingency is 3 months, the same as last reported in July 2011. The IEC has completed an independent analysis and does not agree with MTACC's schedule contingency as stated in their report. However, with the new mitigations in the recent recommended award of the Systems contract, the IEC needs to update its analysis and reconcile remaining differences with MTACC. The IEC is concerned that the schedule contingency has been reduced due to a combination of new construction delays, an overly aggressive schedule for remaining work and resource availability for systems testing. While the project team actively continues to develop opportunities for improving contingency, none have been realized to date.

*IEC Recommendation:* Re-assess significant risks of delay to project completion posed by the recent existing compression of station construction and equipment installation activities in the 86<sup>th</sup> St Station cavern and by the addition of pre-revenue activities.

*IEC Recommendation:* Work with NYCT to resource-load all commissioning activities for MTACC and NYCT projects in order to provide early confirmation of adequacy or deficiency in planned NYCT test and commissioning support.

**Budget Performance:** MTACC reports that the Project's Budget Contingency is \$348M, an increase of \$32M since their last report in July 2011. The IEC agrees with MTACC's statement that the project is on budget.

**Critical Milestones and Issues:** MTACC's CPOC report has identified all current critical milestones and issues of the project.

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

**Follow-up on IEC Recommendations:** There are no open recommendations.



# Second Avenue Subway Phase I

Risk Assessment  
Contract 6: Systems

# Systems Contract Summary



## Scope:

Install, Test & Commission the following systems along the SAS Phase I route from the Lexington/63<sup>rd</sup> Street Station to 105<sup>th</sup> Street:

- Track
- Traction Power
- Signals
- Communication

## Schedule:

- 55 Month duration from NTP
- Schedule driven by interfaces and handoffs

## Budget:

Construction Contract:	\$269.5
Soft Costs & Other	\$42.3
<u>Contingency</u>	<u>\$21.6</u>
Total Project Budget	\$333.4

# Systems Contract Work Challenges



## **Introduction of Latest Technology:**

- Low Vibration Track
- Aluminum Power Rail
- High Speed Network and Communication Systems

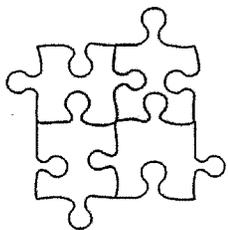
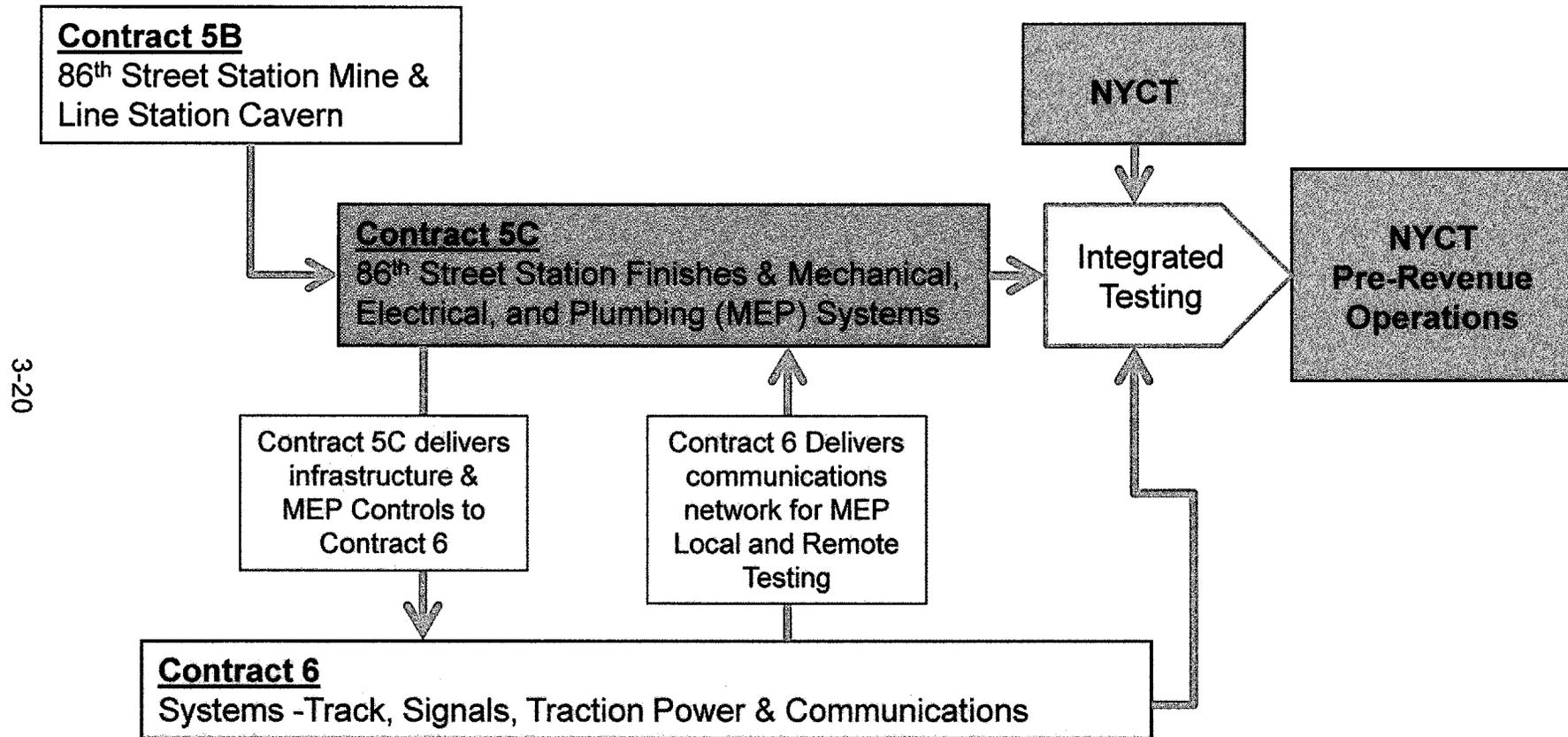
## **Interface Between Systems and Stations Contracts**

- Hand over of infrastructure from Stations to Systems
- Hand over of Local Area Network (LAN) and Wide Area Network (WAN) from Systems to Stations
- Testing of Station Mechanical, Electrical, and Plumbing (MEP) systems at remote centers using LAN installed by Systems
- Coordination of access points and staging areas

## **Potential Schedule Impacts**

- Potential delay from Stations Contracts under construction
- Potential delay from Stations Contracts not yet awarded

# SAS Critical Path



The critical path of the SAS Program moves through several different contracts requiring a high level of coordination and timely hand-off of work areas from predecessor to successor contracts

# Risk Assessment



- In March 2011, a risk assessment process started with an independent risk consultant (Golder Associates)
- Representatives from MTACC, NYCT, MTA-OCO / IEC, FTA Oversight, AECOM & Arup (Design Consultant), Parsons Brinckerhoff (CCM), & Golder Associates (Risk Consultant) participated in the risk workshop, which identified 83 known risks
- A simulation model was created and a risk profile was determined
- MTACC also performed a program wide risk analysis and results were consistent with those obtained by this independent study

# Risk Assessment Results ( Prior to Mitigation)



## **Cost: Proposed Award Cost is Below Budget**

- Risk Assessment construction contract cost range: \$229 M to \$319 M with 80% confidence at \$301 M
- Construction contract budget: \$269.5 Million
- Proposed award of \$262 Million is \$7.5 million below the construction contract budget

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## **Schedule: Proposed Award Schedule is Aggressive**

- Risk Assessment range for duration from NTP: 55 months to 65 months with 80% confidence at 63 months
- Schedule range is heavily driven by risk of late hand-off of work areas from predecessor station finishes contracts at 63<sup>rd</sup>, 72<sup>nd</sup>, 86<sup>th</sup>, and 96<sup>th</sup> Street Stations
- These risks are external to the Systems Contract
- Proposed award schedule is 55 months and this has been accepted by the contractor as a reasonable duration
- Project team is focusing on schedule mitigations to improve confidence

# Most Significant Risks



## Risk

Systems Integration Testing delays

## Mitigations

- Required all contracts to prepare Test and Integration Plan
- Required Systems and Stations Contractors to hire System Integration Managers
- Included test and integration schedule in contract specifications, so that contractor could assess the availability of resources and duration required for testing
- Worked with NYCT to ensure availability of staff to support test and integration schedule

# Most Significant Risks



## Risk

- Contract packaging requires successful coordination of complex interfaces between multiple contractors and sharing of work spaces

## Mitigations

- Developed contract milestones and turnover dates between contracts that include float
- All predecessor contracts to the Systems contract are contractually obligated to turn-over areas one month prior to needed start dates
- Developing a milestone schedule matrix that will be closely monitored at senior level

# Summary



- Several mitigation measures have already been implemented.
- Additional mitigation strategies are being actively developed to provide increased confidence that the SAS Systems contract will be completed within the awarded duration and budget.
- SAS staff will be working closely with MTACC & NYCT staff on the 7 West extension project to take full advantage of lessons learned for the testing and commissioning of the same NYCT systems that will be placed in service prior to SAS.
- We will be reporting back to CPOC in the coming months on the progress of this work and the results of our mitigation efforts.

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**MTA Capital Program  
Commitments & Completions**

**through**

**November 30, 2011**

4-1



**Metropolitan Transportation Authority**

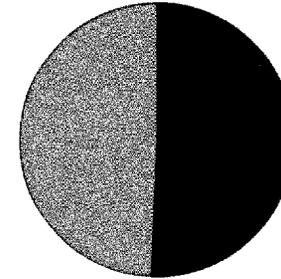
**Capital Projects – Major Commitments – November 2011**

Through the end of November, 40 major commitments remain on or close to goal. Since last month there are 5 new commitment delays beyond 2 months of goal. All delays are discussed on the following pages.

To date, the agencies have committed \$3,975 million. The lag between the actual commitments and the YTD goal is mainly due to delays in a few large projects including: the NYCT 'B' Division subway car purchase (\$638 million), NYCT's 103 A-division and R-142 Car Conversion purchase (\$493 million), the VHF Radio System Upgrade (\$256 million), the East Side Access Manhattan Structures Part 2 & Cavern MEP & Finishes contract (\$322 million) and the 2<sup>nd</sup> Avenue Subway's Track, Signals, Power and Communications contract (\$303 million). Agencies forecast that 63% of the \$8.2 billion 2011 annual goal will be committed by the end of the year.

Actual commitments have saved \$588 million as compared to budget.

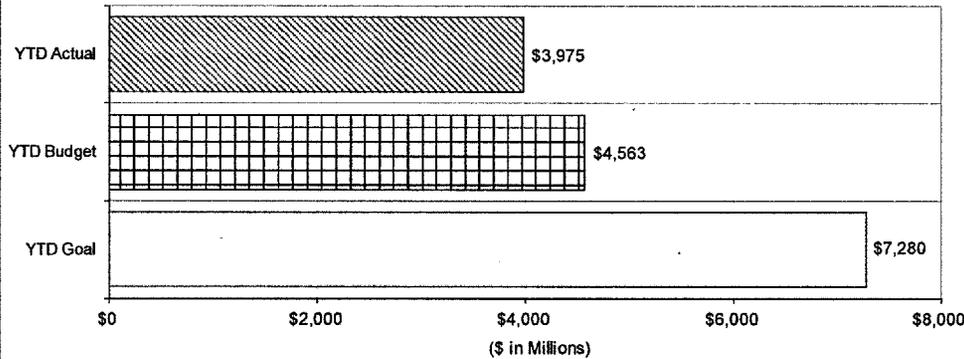
**Year-to-Date Major Commitments**



	Year-to-Date Change		
Green = Commitments made within 2 months of Goal	39	51%	-
Red = Commitments delayed beyond 2 months of Goal	38	49%	↑ 5
	77	100%	

**Budget Analysis**

2011 Annual Goal	\$8,195	
2011 Annual Forecast	63%	of Annual Goal
YTD Goal	89%	
YTD Actual	48%	
Left to Complete	23%	(\$1,194)



**Year-to-Date Agency Breakdown**

	Prior month variance	
	RED	GREEN
<b>New York City Transit</b>		
7 9	+1 RED	—
<b>Long Island Rail Road</b>		
5	—	—
<b>Metro-North Railroad</b>		
9 13	+2 RED	+1 GREEN
<b>Bridges and Tunnels</b>		
10	+1 RED	-1 GREEN
<b>Capital Construction Company</b>		
3 6	—	—
<b>MTA Bus Company</b>		
5 9	+1 RED	—
<b>MTA Police Department</b>		
	—	—

**Capital Projects – Major Commitments – November 2011 – Schedule Variances**

Project	Commitment	Goal	Forecast	Project	Commitment	Goal	Forecast
<b>38 All-Agency Red Commitments (5 new this month)</b>				<b>New York City Transit (continued)</b>			
<i>New York City Transit</i>				<i>Stations</i>			
<i>Subway Cars</i>				<b>Brick Arch Repair: 168th St. and 181st St. (New Item)</b>			
Purchase 300 'B' Division Subway Cars (previously 290 cars)	Purchase Award	Mar-11 \$637.8M	Feb-12 \$637.8M	Construction Award		Nov-11 \$38.0M	Jun-12 \$38.0M
Best and Final offers have been postponed for administrative reasons, but NYCT expects to have it before the Board in the first quarter of 2012.				Commitment date extended to explore the possibility of replacing Glass Fiber Reinforced Polymer specified in design with less flammable materials. The design team is reviewing this.			
Purchase 103 A- Division Cars & R-142 Conversions (previously 123 A- Division Cars)	Purchase Award	May-11 \$493.4M	Dec-11 \$493.4M	Construction		May-11 \$33.4M	Sep-11 (A) \$19.2M
The option award goal has been changed due to ongoing negotiations with vendor.				Delay partly due to utility issues. Cost decreased due to lower allowance for structural work, upgrade of electrical systems and improved market conditions.			
<i>Buses</i>				<b>Metro- North Railroad</b>			
Purchase 90 Articulated Buses	Purchase Award	Apr-11 \$78.1M	Jun-12 \$70.6M	<i>Track &amp; Structures</i>			
Award delayed pending successful completion of the pre-qualifying shaker table test, completed in September. Results are now under review by the Project Office. Cost decrease due to the exclusion of cameras and other items that will be procured separately.				2011 Cyclical Track Program			
Purchase 90 Diesel Buses - New Flyer Pilot	Purchase Award	Mar-11 \$46.2M	Jun-11 (A) \$44.2M	Construction		Mar-11 \$13.0M	Jun-11 (A) \$13.0M
Award was delayed several months pending final agreement on terms and conditions.				Commencement of work delayed due to an extended review process.			
Purchase 171 Standard CNG Buses	Purchase Award	Mar-11 \$133.1M	Jun-11 (A) \$87.1M	Design Award		Oct-11 \$2.4M	Jun-12 \$2.4M
Project cost decreased reflecting savings from changing the type of buses from Hybrid to CNG and the exclusion of cameras, radios and other items that will be procured separately.				Further analysis of the project to ensure the best value scope was advanced has delayed the commitment date from the plan.			
<i>Signals &amp; Communications</i>				Harlem River Lift Bridge Breaker Houses/Controls - Construction			
VHF Radio System Upgrade	Construction	Jun-11 \$255.8M	Mar-12 \$210.7M	Construction Award		Oct-11 \$13.0M	Sep-12 \$13.0M
Procurement approved by the October Board. Contract documents sent to the New York State Comptroller for review in November and it may take up to 90 days to conclude the review process. Project cost reduced reflecting selected bid.				Procurement will proceed upon completion of the HRLB Cable Project Design. Procurement for both projects to be combined under a single contract. Award anticipated in Sept. 2012.			
PA/CIS: 43 Stations Install Cables	Construction	Sep-11 \$55.6M	Sep-12 \$55.6M	Construction		Aug-11 \$4.8M	Apr-12 \$3.8M
The original plan to award by competitive bidding process is being evaluated vs. using in-house construction forces. Awaiting revised estimate for in-house construction.				Further analysis of the project to ensure the best value scope was advanced has delayed the commitment date from the plan. Bridge painting contract award anticipated for April 2012.			
				<i>Power</i>			
				Harlem & Hudson Substations - Force Account			
				Force Account		Jul-11 \$2.9M	Mar-12 \$2.9M
				Further analysis of the project to ensure that the best value scope was advanced delayed the commitment date from the plan. Switchgear purchase anticipated for a December 2011 award, pending Board approval.			

**Capital Projects – Major Commitments – November 2011 – Schedule Variances**

Project	Commitment	Goal	Forecast
<b>Metro- North Railroad (continued)</b>			
<b>Substation Bridge 23 (New item)</b>	Construction	Oct-11 \$31.4M	Mar-12 \$31.4M
Coordination with Con Edison for approval of equipment design has taken longer than expected. MNR's review and acceptance of final design documents is underway.			
Harlem/Hudson Substations - Cyclical DC Switchgear	Construction	Jul-11 \$11.1M	Dec-11 \$11.1M
Further analysis of the project to ensure that the best value scope was advanced delayed the commitment date from the plan.			
Harlem/Hudson Substations - Material	Material	Jul-11 \$4.6M	Dec-11 \$4.6M
Further analysis of the project to ensure that the best value scope was advanced delayed the commitment date from the plan.			
<b>Stations</b>			
New Haven Line Station Ph. 2	Construction	Jul-11 \$33.2M	May-12 \$33.2M
Originally delayed due to project redesign for breakout of work in support of the MTA mentoring program. Recent delay from December to May due to project redesign.			
Fordham Station Improvements	Construction	Sep-11 \$11.3M	Jun-12 \$11.3M
Code compliance issue with existing egress raised during design has resulted in additional scope and additional review with NYS code compliance office.			
<b>Communications and Signals</b>			
PTC Rolling Stock Signals Onboard Design / Radio Spectrum Procurement	Construction	Jun-11 \$5.3M	Dec-11 \$5.3M
Purchase is delayed due to issues with procurement, the FCC and legal issues. An award is anticipated for December 2011.			
<b>Shops and Yards</b>			
Harmon Shop Improvements Construction Ph.IV Stage 1	Construction	Jul-11 \$20.3M	Oct-11 (A) \$15.3M
Further analysis of the project to ensure the best value scope was advanced delayed the commitment. Budget less than plan due to deferred scope of work as well as favorable bids.			

Project	Commitment	Goal	Forecast
<b>Metro- North Railroad (continued)</b>			
<b>Harmon Shop Improvements Design Phase V (New Item)</b>	Design	Nov-11 \$8.2M	Jun-12 \$8.2M
Further review of scope has delayed the advertisement for the consultant thereby delaying the award from November to June 2012.			
<b>Bridges &amp; Tunnels</b>			
<b>Throgs Neck</b>			
<b>Suspended Span Replacement Phase A, Design (New Item)</b>	Design Award	Oct-11 \$10.1M	Jan-12 \$10.1M
Delay due to additional time needed to perform more extensive review and evaluation of the consultants' proposals.			
<b>MTA Capital Construction</b>			
<b>East Side Access</b>			
Plaza Substation & Queens Structure Construction	Construction	Apr-11 \$225.8M	Aug-11 (A) \$162.1M
Budget decrease due to scope transfer and favorable bids. Delay in award due to extension of bid period and extended qualification review after bids received.			
GCT Concourse Finishes Early Work	Construction	Jun-11 \$30.0M	Nov-11 (A) \$46.5M
At the time goal was set, scope and estimate were in process; budget now reflects the bid result, which is favorable to the revised forecast of \$47.6 M based on the estimate for the completed package. Award pending completion of qualification review.			
Manhattan Structures Part 2 & Cavem MEP & Finishes	Construction	Jul-11 \$321.9M	Mar-12 \$325.9M
Repackaging contract as part of an effort to recover and/or minimize delays in turnover from prior contract. Budget increase represents net impact of scope transfers. Project rebaselining underway, as reported to Board in Sept-2011, therefore schedule subject to change.			

### Capital Projects – Major Commitments – November 2011 – Schedule Variances

Project	Commitment	Goal	Forecast
<b>MTA Capital Construction (continued)</b>			
<i>East Side Access</i>			
55th Street Vent Plan	Construction	Sep-11 \$71.6M	Apr-12 \$63.6M
Some delays were encountered in completing the entire package for advertising. Budget decrease reflects a revised contract estimate. Project rebaselining underway, as reported to Board in Sept-2011, therefore schedule subject to change.			
<i>Second Avenue Subway</i>			
Track, Signals Power and Communication Systems	Construction	Jul-11 \$303.4M	Dec-11 \$333.4M
Systems contract forecast award date moved to December due to later procurement to coordinate with the 7 West Systems contract and due to an extended RFP procurement process. The December award forecast must be coordinated with Procurement. Budget increase reflects an increased estimate for communications and other electrical work and an increased allocation for design reviews and inspection of built facilities.			
86th St Station Structure	Construction	Mar-11 \$422.4M	Aug-11 (A) \$338.4M
Award delayed due to a federal certification requirement that has now been resolved.			
<b>MTA Bus</b>			
<i>Bus Company Projects</i>			
Security Upgrade - CP ECH YONKERS	Construction	May-11 \$2.8M	Mar-12 \$2.4M
Apparent low bidders' proposal was non-responsive to RFP/IFB. The bidder was notified in November and has since submitted a letter of protest.			
Electric Upgrade of Emergency Generators at 6 Depots	Construction	Jul-11 \$7.9M	Mar-12 \$7.7M
Delay due to a change in purchase process from contract to a purchase order.			
Fire Protection (LaGuardia and Baisley Park)	Construction	Jul-11 \$6.5M	Nov-11 (A) \$4.6M
Design had to be revised because of new information that was received from the Department of Environmental Protection. Existing water pressure would be insufficient to provide flow to furthest sprinkler heads. Estimate at completion reduced due to favorable bids.			

Project	Commitment	Goal	Forecast
<b>MTA Bus (continued)</b>			
Depot Equipment	Construction	Apr-11 \$7.2M	Mar-12 \$7.2M
Design revisions for the College Point depot caused a delay to this project. Two of the contracts, chassis wash lifts at Spring Creek and College Point, were committed in September.			
Service Vehicles	Purchase Award	Jul-11 \$4.0M	Feb-12 \$4.0M
The lead time to complete all the required procurement-related tasks took longer than anticipated.			
Security Upgrade - Eastchester and La Guardia (New Item)	Construction Award	Nov-11 \$7.5M	Aug-12 \$7.5M
Project delayed because the decision was made to re-issue for a competitive proposal to take advantage of the favorable bid climate.			
Relocate Tanks/Washer-Eastchester	Construction	Jun-11 \$10.0M	Jan-12 \$12.5M
Delay due to bid opening rescheduled to allow design revisions addressing bidder Request for Information to be incorporated into the contract documents.			
Purchase 79 Standard CNG Buses	Purchase Award	Mar-11 \$50.9M	Jun-11 (A) \$42.5M
The procurement package was rescheduled from the Feb. Board to the May Board. Project cost decreased reflecting savings from changing the type of buses from Hybrid to CNG and the exclusion of cameras, radios and other items that will be procured separately.			
Fueling Lane and Bus Washer (La Guardia)	Construction	Mar-11 \$6.7M	Jul-11 (A) \$2.4M
Award delayed due to potential issues with the low bidder. The bid was lower-than-budget.			

### Capital Projects – Major Commitments – November 2011 – Budget Only\* Variances

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

Project	Commitment	Goal	Forecast
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#### 15 All-Agency Budget only variances (0 new this month)

##### New York City Transit

###### Bus Purchases

Project	Commitment	Goal	Forecast
Purchase 328 Articulated Buses	Purchase Award	Jul-11	Jun-11 (A)
		\$284.4M	\$251.9M
Project cost decrease due to improved market conditions and exclusion of the bus cameras (planned to be awarded separately).			

##### Long Island Rail Road

###### Bridges

Project	Commitment	Goal	Forecast
Construct 3 Montauk Branch Bridges	Construction	Oct-11	Sep-11 (A)
		\$25.0M	\$19.0M
Revised estimate at completion reflects favorable bid.			
Queens Blvd. Bridge	Construction	Oct-11	Oct-11 (A)
		\$22.1M	\$11.3M
Revised estimate at completion reflects favorable bid.			

##### MTA Capital Construction

###### 7 West Extension

Project	Commitment	Goal	Forecast
Site K - Vent Building for 34th Street Station	Construction	Mar-11	Feb-11 (A)
		\$92.3M	\$62.5M
Budget change reflects the results of a favorable bid.			
Systems, Finishes, and Core & Shell of Site A Vent Building	Construction	Jun-11	Aug-11 (A)
		\$586.2M	\$517.3M

To ensure the most competitive bidding, MTACC changed the bid opening date from March to June as requested by prospective bidders. Actual / Forecast reflects contract value and some support costs, but excludes contract contingency and remaining support costs which will be added once funding becomes available from a few funding agreement with the City and Hudson Yards Development Corporation.

Project	Commitment	Goal	Forecast
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##### MTA Bus

###### Bus Company Projects

Project	Commitment	Goal	Forecast
Additional Fueling Capacity BP, JFK, LG	Construction	Feb-11	Apr-11 (A)
		\$8.7M	\$3.6M
Forecast reflects the results of a favorable bid. 2 month delay due to multiple addendums.			
Fire Projection JFK, LG, BP, ECH	Construction	May-11	May-11 (A)
		\$5.3M	\$4.0M
Estimate at Completion reduced due to favorable bids.			

##### Bridges & Tunnels

###### Bronx-Whitestone Bridge

Project	Commitment	Goal	Forecast
Deck Replacement - Queens Approaches	Construction Admin.	Feb-11	Feb-11 (A)
		\$16.0M	\$12.6M
Selected consultant's negotiated contract was less than budget.			
Deck Replacement - Elevated and On Grade Queens Approach	Construction	May-11	Jul-11 (A)
		\$240.0M	\$114.0M
Favorable variance due mainly to pre-award mitigations made by the agency, a low bid and lower-than-estimated commodity prices. Date changed to accommodate related NYC Department of Parks & Recreation mitigation work.			

###### RFK Bridge

Project	Commitment	Goal	Forecast
Deck Replacement - Bronx/Manhattan Ramps and Toll Plaza Utility Relocation	Construction	Sep-11	May-11 (A)
		\$32.8M	\$11.2M
\$10M of the favorable variance is due to scope and quantity reductions as well as elimination of allowances and contingencies. The remaining \$10M of the variance due mainly to the favorable market and low bid.			

**Capital Projects – Major Commitments – November 2011 – Budget Only\* Variances**

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

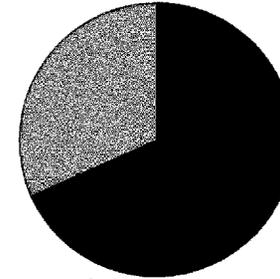
<b>Project</b>	<b>Commitment</b>	<b>Goal</b>	<b>Forecast</b>
<b><i>Bridges &amp; Tunnels (continued)</i></b>			
<b><i>Throgs Neck Bridge</i></b>			
Suspended Span Repairs	Construction	Jun-11 \$46.6M	Jun-11 (A) \$21.2M
Low bid reflects a continuing favorable bid market.			
Rehabilitate Orthotropic Deck Phase B	Construction	Aug-11 \$40.0M	Jul-11 (A) \$14.9M
Low bid reflects a continuing favorable bid market.			
Paint Bronx and Queens Approach Spans	Painting Contract	Aug-11 \$50.0M	Jul-11 (A) \$34.8M
Low bid reflects a continuing favorable bid market.			
<b><i>Verrazano Bridge</i></b>			
Toll Plaza - East and West Bound Ramp Improvements	Construction Admin.	Jul-11 \$7.2M	Jul-11 (A) \$5.0M
Reflects a continuing favorable bid market.			
Toll Plaza - East and West Bound Ramp Improvements	Construction	Jul-11 \$83.0M	Sep-11 (A) \$52.4M
Reflects a continuing favorable bid market.			

### Capital Projects – Major Completions – November 2011

Through the end of November, MTA agencies were on or close to goal for 28 of 41 major anticipated completions. There have been 3 recent completion delays beyond 2 months of goal. All delays are discussed on the following page.

To date, agencies completed \$1,944 million in capital projects which is \$627 million less than goal partly due to delays at NYCT (\$440 million) and MTACC (\$250 million). By year-end, agencies are on track to complete \$2.9 billion (71%) of the 2011 Annual Goal of \$4.1 billion.

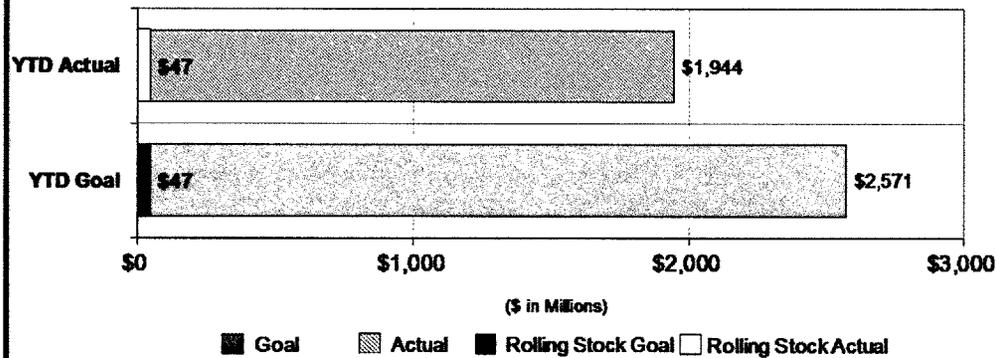
### Year-to-Date Major Completions



	Year-to-Date Change
Green = Completions made within 2 months of Goal	28 68% ↑ 2
Red = Completions delayed beyond 2 months of Goal	13 32% ↑ 3
<b>Total</b>	<b>41 100%</b>

### Budget Analysis

2011 Annual Goal	\$4,080	
2011 Annual Forecast	71%	of Annual Goal
YTD Goal	63%	
YTD Actual	48%	
Left to Complete	33%	(\$973)



### Year-to-Date Agency Breakdown

Agency	Prior month variance	
	RED	GREEN
<b>New York City Transit</b>		
6 2	+1 RED	+2 GREEN
<b>Long Island Rail Road</b>		
8 2	+1 RED	---
<b>Metro-North Railroad</b>		
6 4	+1 RED	---
<b>Bridges and Tunnels</b>		
1	---	---
<b>Capital Construction Company</b>		
5 2	---	---
<b>MTA Bus Company</b>		
1 3	---	---
<b>MTA Police Department</b>		
1	---	---

### Capital Projects – Major Completions – November 2011 – Schedule Variances

Project	Completion	Goal	Forecast
<b>13 All-Agency Red Completions (3 new this month)</b>			
<b>New York City Transit</b>			
<i>Stations</i>			
Rockaway Line Stations (3 Stations)	Construction	Sep-11 \$54.2M	Jan-12 \$54.2M
Delay originally due to Long Island Power Authority (LIPA) power turn-offs during the Summer due to higher demands for electric power. Additional and recent 1 month delay needed for contractor to complete major punch list items and submit contract deliverables.			
<i>Signals</i>			
CBTC Canarsie: Equip 64 R-160 Cars (New Item)	Construction	Nov-11 \$61.2M	Mar-12 \$61.2M
Project completion extended due to delay in completing Odometry study and availability of weekend General Orders for the final cutover.			
<b>Metro-North Railroad</b>			
<i>Track</i>			
2010 Cyclical Track Program	Construction	Mar-11 \$13.0M	Jun-11 (A) \$13.0M
Equipment repairs and crew reassignments throughout the maintenance period delayed the 2010 surfacing work.			
<i>Grand Central Terminal</i>			
Vital Processor System (GCT)	Construction	Aug-11 \$6.5M	Dec-11 \$6.5M
Installation of HVAC units. Given to operational needs and difficulty getting track outage to perform work, the completion is delayed until December 2011.			
<i>Power</i>			
Substation Retrofit Harlem & Hudson - Tagging Relays	Construction	Aug-11 \$12.7M	Mar-12 \$12.7M
Deliveries and installation are now expected to be completed by March 2012. This is a result of certain MNR approved configuration changes and addition of indication relays.			
Harlem & Hudson Lines Power (New Item)	Construction	Nov-11 \$9.0M	Mar-12 \$9.0M
Final design is on hold temporarily. Review by Town of Newcastle leadership will commence when elected officials take office in January 2012.			

Project	Completion	Goal	Forecast
<b>Long Island Rail Road</b>			
<i>Line Structures</i>			
Port Washington Branch Abutment & Walls	Construction	Jun-11 \$19.0M	Nov-11 (A) \$29.8M
Revised budget and schedule reflect recent option award of the Port Washington Branch.			
<i>Signals</i>			
Penn Station 3rd Rail & Signal (New Item)	Construction	Oct-11 \$9.6M	Mar-12 \$9.6M
Schedule revised to reflect Amtrak manpower issues and lack of approval from NYCDEC to close the main water valve.			
<b>MTA Capital Construction</b>			
<i>East Side Access</i>			
Harold Supervisory Control System	Construction	Sep-11 \$7.1M	Dec-12 \$8.1M
Delay due to the additional modification work and the late submittal of control lines which impacted the cut-over work. Budget increased to include additional sequential software modifications to the supervisory control system in support of construction and the purchase of additional servers.			
<i>Fulton Street Transit Center</i>			
Dey St. Concourse & R Underpass	Construction	Sep-11 \$26.2M	Jul-12 \$26.2M
At rebaseline, MTACC forecasted November 2012 completion. With the implementation of new passenger information technology and other enhancements, MTACC will complete the contract later than anticipated, but still in time to meet the customer benefit milestone.			

**Capital Projects – Major Completions – November 2011 – Schedule Variances**

<b>Project</b>	<b>Completion</b>	<b>Goal</b>	<b>Forecast</b>
<b>MTA Bus</b>			
<i>Bus Company Projects</i>			
Power Upgrade- LaGuardia	Construction	May-11 \$2.1M	Aug-11 (A) \$2.3M
Project completion pushed back due to additional work that will be needed for this project. A previous indication of a 2012 completion was an error.			
New Roof and Ventilation System- LaGuardia	Construction	Jul-11 \$7.0M	Jun-12 \$7.0M
Project originally delayed because contractor installed heat recovery units with incorrect dimensions. Additional recent delay due to issue with gas service capacity.			
New Roof and Vent System at Far Rockaway	Construction	Oct-11 \$6.9M	May-12 \$6.9M
Delay due to unanticipated field conditions. Roof panels have deteriorated and must be replaced.			

**Capital Projects – Major Completions – November 2011 – Budget\* Variances**

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

Project	Completion	Goal	Forecast
<b>4 All-Agency Budget only variances (1 new this month)</b>			
<i>Long Island Rail Road</i>			
<i>Track</i>			
ACL Direct Fixation Replacement	Construction	May-11 \$61.5M	May-11 (A) \$53.5M
Revised Estimate at Completion (EAC) reflects estimated final costs of project.			
2010 Annual Track Program	Construction	Jun-11 \$62.4M	Jun-11 (A) \$57.4M
Revised EAC to reflect estimated final costs of project.			
<b>MTA Capital Construction</b>			
<i>Fulton Street Transit Center</i>			
R Southbound Platform	Construction	Sep-11 \$17.0M	Sep-11 (A) \$18.9M
Increase due to additional work including a new staircase to be constructed at the Brookfield Entrance.			
<i>Second Avenue Subway</i>			
<b>86th St. Open Cuts &amp; Utility</b> <i>(New Item)</i>	Construction	Sep-11 \$47.0M	Nov-11 (A) \$54.8M
Budget increase and delay due to unforeseen utility interferences.			

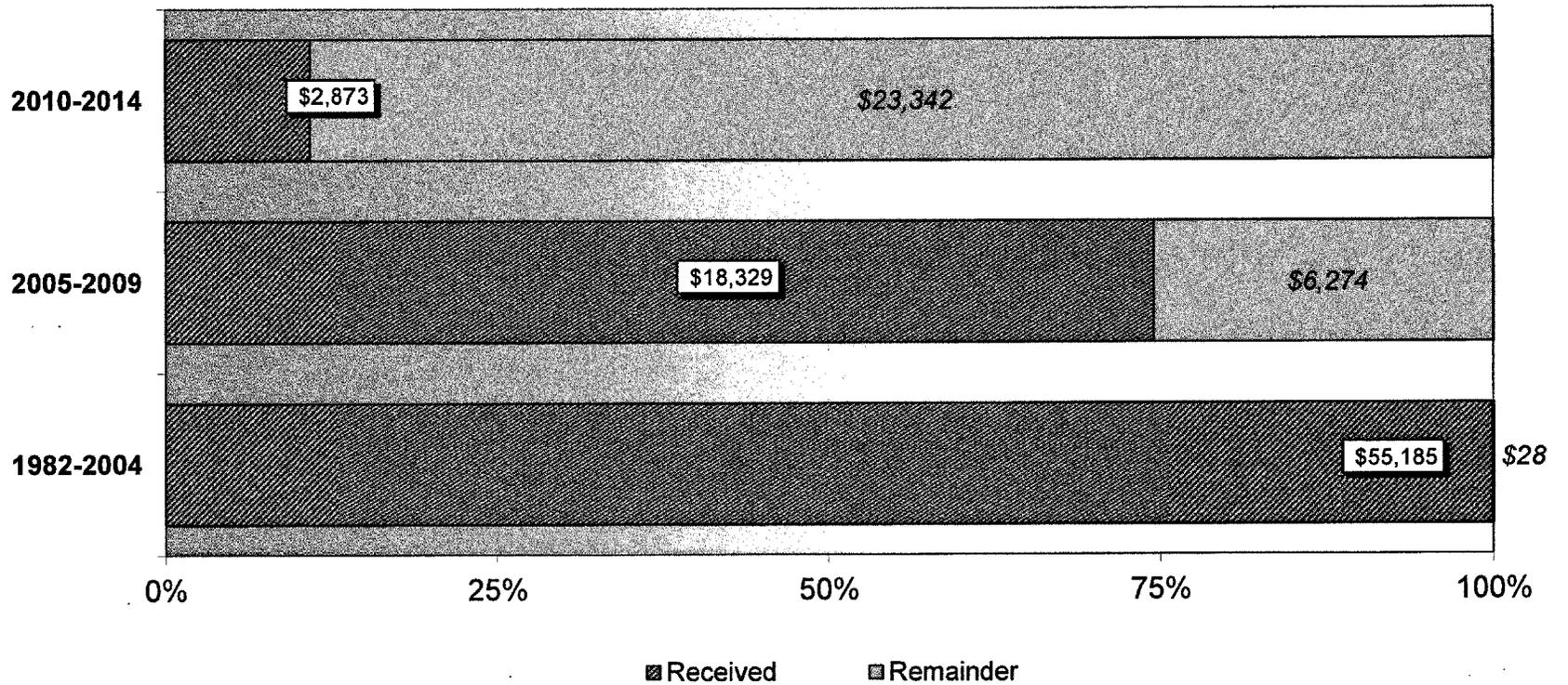
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# Status of MTA Capital Program Funding

4-12

**Capital Funding (November 30, 2011)**  
\$ in millions

Capital Program



## Capital Funding Detail (November 30, 2011)

\$ 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 October	This month	Received to date
	\$5,207	\$5,190	-	\$5,190
	3,286	1,483	-	1,483
	336	222	-	222
	7	7	-	7
	654	654	-	654
	405	405	-	405
	2,367	1,301	14	1,315
	152	143	-	143
	1,039	370	-	370
	1,450	480	-	480
	3,243	3,039	-	3,039
	1,262	1,049	-	1,049
	5,078	3,885	-	3,885
	117	88	-	88
<b>Total</b>	<b>\$24,603</b>	<b>\$18,316</b>	<b>\$14</b>	<b>\$18,329</b>

### 2010-2014 Program

Federal Formula  
 Federal Flexible and 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)  
*Future State and Local Funding*

	Funding Plan	Receipts		
	Current	Receipts thru October	This month	Received to date
	\$6,415	\$1,075	-	\$1,075
	435	43	323	366
	225	52	-	52
	500	180	-	180
	210	34	-	34
	6,070	225	-	225
	2,453	940	-	940
	343	1	-	1
	9,564	-	-	-
<b>Total</b>	<b>\$26,215</b>	<b>\$2,550</b>	<b>\$323</b>	<b>\$2,873</b>

**3rd Quarter 2011 Traffic Light Report on MTA Capital Program Projects**

**Traffic Light Report Project Terms and Definitions**

**Projects in Design: 50**

- Green: No indices over 115% and no index movement greater than 15%
- Red-Cost Index: An increase of 15% or more since last Traffic Light Report
- Red-Schedule Variance: An increase of 3 months or more since last Traffic Light Report
- Yellow: Previously indicated as red with no new substantial change since last Traffic Light Report

**Projects in Construction: 203**

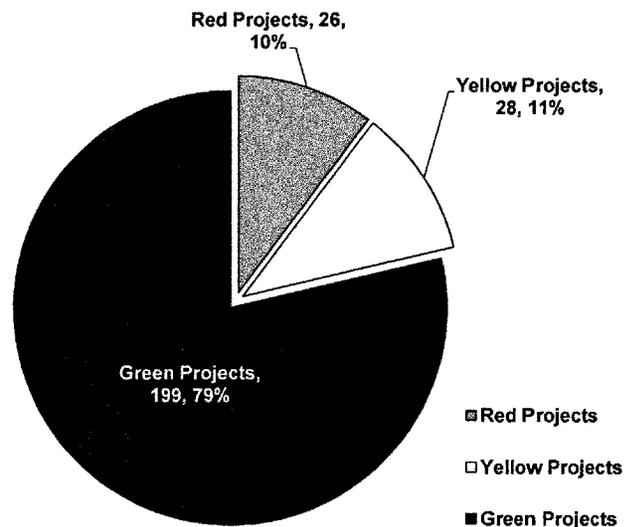
- Green: No indices over 110% and no index movement greater than 10%
- Red-Cost Index: An increase of 10% or more since last Traffic Light Report
- Red-Schedule Variance: An increase of 3 months or more since last Traffic Light Report
- Yellow: Previously indicated as red with no new substantial change since last Traffic Light Report

**Report Index Formulas and Criteria:**

- > **Cost Index** = Total Project EAC / Current Approved Budget
- > **Schedule Variance** = Number of months of change in schedule since last Traffic Light Report
- > **Contingency Index** = % Contingency used / % 3rd Party Contract Completion (contingency used includes expended & pending AWOs). Triggered when project has reached 50% or higher. Threshold for NYCT is \$15M or more, other agencies \$5M or more.
- > Excludes projects in CPOC's Risk-Based Monitoring Program listed at end of report
- > Only projects with budgets of \$5M or greater are included in the report
- > Projects in design must be at a 30% level or greater

> Following this report are one-page agency summaries (on pink paper stock) of issues associated with each project showing a red indicator.

**Project Designation for a Total of 253 Projects Reviewed  
3rd Quarter 2011**



<b>NYCT</b>	137	25	22	<b>Total Projects 184</b>
<b>MNR</b>	14	1	2	<b>Total Projects 17</b>
<b>LIRR</b>	19	1		<b>Total Projects 20</b>
<b>B&amp;T</b>	21	1		<b>Total Projects 22</b>
<b>MTA Bus</b>	8	2		<b>Total Projects 10</b>

**3rd Quarter 2011 Traffic Light Report  
Projects in Design and Construction**

▲ = Index increase: Trending indicates condition worsening 10% (Design 15%) or greater since last quarterly report  
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— = No Change since last quarterly report

Description	Capital Plan	Phase	Total Project EAC	% Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Replace HP EMs	05 - 09	Construction	\$5,243,039	78	.00	—	1.00	▼	0	—	Y
Rehabilitate Avenue M Station - Brighton Line	05 - 09	Construction	\$43,698,445	82	1.07	▼	1.07	▲	0	—	Y
Rehabilitate Avenue H Station - Brighton Line	05 - 09	Construction	\$45,955,272	82	1.06	▼	1.04	▲	0	—	Y
Rehabilitate Avenue J Station - Brighton Line	05 - 09	Construction	\$44,803,663	82	.66	▼	1.03	▲	0	—	Y
Rehabilitate Bleecker Street Station - Lexington Avenue Line	05 - 09	Construction	\$31,869,486	57	.95	▲	1.02	▲	0	—	G
Rehabilitate 59th Street Station - Broadway-7th Avenue Line	05 - 09	Construction	\$48,262,635	96	1.01	▼	1.04	▲	0	—	G
Rehabilitate 59th Street Station - 8th Avenue Line	05 - 09	Construction	\$58,101,451	96	1.00	▲	1.02	▲	0	—	G
Kings Highway Station - Brighton Line	05 - 09	Construction	\$29,706,857	98	.76	▼	1.02	▲	0	—	Y
Newkirk Avenue Plaza Station Phase 2 - Brighton Line	05 - 09	Construction	\$40,652,232	91	1.09	▲	.99	▲	0	—	Y
Rehabilitate Jay Street Station - FUL	05 - 09	Construction	\$62,341,353	96	.03	▲	1.00	▼	0	—	G
Rehabilitate Morrison-Sound View Avenue Station - Pelham Line	05 - 09	Construction	\$24,926,917	94	.36	▲	1.00	▼	0	—	G
Rehabilitate Parkchester-E 177th Street Station - Pelham Line	05 - 09	Construction	\$34,263,138	92	.98	▲	1.01	▲	0	—	G
Rehab St Lawrence Av PEL	05 - 09	Construction	\$26,153,018	68	.73	▲	.99	▼	0	—	G
Rehabilitate Elder Avenue Station - Pelham Line	05 - 09	Construction	\$25,889,282	63	.16	▲	1.00	▲	0	—	G
Rehabilitate Whitlock Avenue Station - Pelham Line	05 - 09	Construction	\$23,772,702	95	.49	▲	1.00	▼	0	—	G
Rehabilitate Beach 67th Street Station - Far Rockaway Line	05 - 09	Construction	\$22,080,331	70	.58	▼	1.01	▼	0	—	Y
Rehabilitate Beach 60th Street Station - Far Rockaway Line	05 - 09	Construction	\$18,176,495	58	.63	▼	1.01	▲	0	—	Y
Rehabilitate Beach 44th Street Station - Far Rockaway Line	05 - 09	Construction	\$17,802,293	70	.60	▼	1.00	▲	0	—	Y
Rehabilitate Beach 36th Street Station - Far Rockaway Line	05 - 09	Construction	\$16,646,056	63	.63	▼	.99	▲	0	—	Y
Rehabilitate Beach 25th Street Station - Far Rockaway Line	05 - 09	Construction	\$18,239,394	68	.56	▼	1.00	▲	0	—	Y
Rehabilitate Mott Avenue Station - Far Rockaway Line	05 - 09	Construction	\$11,176,497	90	.30	▼	1.00	▲	1	—	G
Rehabilitate Beach 90th Street Station - Rockaway Line	05 - 09	Construction	\$19,127,364	66	1.40	▲	.99	▼	3	▲	R
Rehabilitate Beach 98th Street Station - Rockaway Line	05 - 09	Construction	\$20,362,934	68	1.52	▲	1.01	▲	3	▲	
Rehabilitate Beach 105th Street Station - Rockaway Line	05 - 09	Construction	\$18,080,277	67	1.48	▲	.99	▲	3	▲	
Rehabilitate East 180th Street Station - White Plains Road Line	05 - 09	Construction	\$45,804,161	78	1.12	▲	1.00	▲	0	—	R



3rd Quarter 2011 Traffic Light Report  
Projects in Design and Construction

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Description	Capital Plan	Phase	Total Project EAC	% Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Station Accessibility (ADA) - Bleecker-Broadway/Lafayette Street Station Complex	05 - 09	Construction	\$17,506,338	71	1.71	▲	1.06	▲	0	—	Ⓡ
Station Accessibility (ADA) Kings Highway Station - Brighton Line	05 - 09	Construction	\$10,796,673	90	.85	▼	1.14	▲	0	—	Ⓡ
Station Accessibility (ADA) Jay Street Station - Fulton Line	05 - 09	Construction	\$15,426,748	95	.26	▼	.99	▼	0	—	ⓐ
Station Accessibility (ADA) Jay Street-Lawrence Street Transfer	05 - 09	Construction	\$16,454,977	92	.03	—	1.00	—	0	—	ⓐ
Station Accessibility (ADA) Mott Avenue - Rockaway Line	05 - 09	Construction	\$10,569,812	60	.84	▲	1.00	▲	1	—	ⓐ
Station Accessibility (ADA) East 180th Street Station - White Plains Road Line	05 - 09	Construction	\$9,938,224	80	.31	▼	1.00	▲	0	—	ⓐ
ADA 45 Rd-Court House Sq: FLS	05 - 09	Construction	\$17,678,407	100	.00	—	1.04	▲	0	—	Ⓨ
Passenger Transfer: Lawrence Street/Jay Street Stations	05 - 09	Construction	\$60,338,436	93	.02	▼	1.00	▼	0	—	ⓐ
Rehabilitate 71st Street Station - West End Line	05 - 09	Construction	\$10,033,656	84	1.06	▼	1.03	▲	0	—	ⓐ
Rehabilitate 18 Avenue Station - West End Line	05 - 09	Construction	\$9,646,707	64	1.17	▼	1.02	▲	0	—	ⓐ
Rehabilitate 20 Avenue Station - West End Line	05 - 09	Construction	\$9,307,190	75	.57	▼	1.01	▲	0	—	ⓐ
Rehabilitate 25 Avenue Station - West End Line	05 - 09	Construction	\$11,264,578	71	.86	▼	1.11	▲	0	—	Ⓡ
Rehabilitate Bay 50th Street Station - West End Line	05 - 09	Construction	\$9,483,663	64	1.59	▲	1.02	▲	0	—	ⓐ
Rehabilitate Bay Parkway Station - West End Line	05 - 09	Construction	\$22,921,939	52	1.34	▲	1.02	▲	0	—	Ⓡ
Station Accessibility (ADA) Bay Parkway Station - West End Line	05 - 09	Construction	\$13,323,842	32	2.70	▼	1.00	▼	0	—	ⓐ
Install Induction Loops for 642 Station Booths	05 - 09	Construction	\$11,353,440	54	.42	▼	.85	▼	0	—	ⓐ
Deep Well Rehab FUL	05 - 09	Construction	\$16,313,068	98	1.00	▲	1.00	▲	0	—	ⓐ
Vent Plant Rehabilitation - Jackson Avenue - Queens Boulevard Line	05 - 09	Construction	\$76,021,543	78	.14	▲	1.00	—	0	—	ⓐ
Overcoat Bronx Park East to 241st Street - White Plains Road Line	05 - 09	Construction	\$37,399,259	92	.47	▼	1.00	▲	2	—	ⓐ
Ocean Parkway Station Viaduct - Brighton Line	05 - 09	Construction	\$33,565,813	97	1.01	▲	1.00	▼	0	—	ⓐ
Overcoat Whitlock Avenue Portal to Pelham Bay Park - Pelham Line	05 - 09	Construction	\$28,158,438	91	.00	—	1.00	▼	0	—	Ⓨ
Rockaway Viaduct Phase 2	05 - 09	Construction	\$25,214,744	92	.45	—	1.00	▼	0	—	ⓐ
Overcoat 125 St. Arch BW7	05 - 09	Construction	\$13,178,960	94	.82	▲	1.00	▲	0	—	ⓐ

**3rd Quarter 2011 Traffic Light Report  
Projects in Design and Construction**

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Description	Capital Plan	Phase	Total Project EAC	% Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Overcoat 103rd Street to Main Street Portal - Flushing Line	05 - 09	Construction	\$27,532,390	97	.41	▼	1.00	▼	0	—	ⓐ
Overcoat 27th St-41 Av AST	05 - 09	Construction	\$15,314,079	0	.00	—	1.00	—	0	—	ⓐ
Flooding Mitigation: Various Locations	05 - 09	Construction	\$89,115,729	98	.02	—	.99	▼	0	—	ⓐ
Overcoat Portal - S.27th St AST	05 - 09	Construction	\$14,199,694	84	.69	▼	1.00	—	0	—	ⓐ
Structural Rehabilitation 63rd Street to Bay 50th Street - West End Line	05 - 09	Construction	\$38,896,601	62	.48	▼	.93	▼	0	—	ⓐ
Structural Rehabilitation 9th Avenue to 63rd Street - West End Line	05 - 09	Construction	\$15,736,865	75	.00	—	.98	▲	0	—	ⓐ
Signal Control Modifications Phase 3	05 - 09	Construction	\$43,251,300	70	.00	—	1.00	▲	0	—	ⓐ
ATS B - Prep Work	05 - 09	Construction	\$15,031,374	96	.00	—	1.00	▲	0	—	Ⓨ
Signal Key-By Circuit Modifications Phase 2	05 - 09	Construction	\$26,758,520	51	.00	—	1.00	—	0	—	ⓐ
Fire Suppression Ph 1	05 - 09	Construction	\$20,535,288	77	1.74	▲	1.13	▲	3	▲	Ⓡ
Relay Replacement	05 - 09	Construction	\$10,817,410	90	.00	—	1.00	▼	0	—	ⓐ
Copper Cable Replacement: Various locations	05 - 09	Construction	\$10,973,734	89	.00	—	1.05	▲	0	—	ⓐ
Antenna Cable Replacement Phase 2	05 - 09	Construction	\$66,963,607	17	1.35	▲	1.07	▲	0	—	ⓐ
VHF Radio System Upgrade DES	05 - 09	Construction	\$15,234,293	100	.00	—	1.06	▼	0	—	ⓐ
Stn Comm Room HVAC Ph 1	05 - 09	Construction	\$45,206,522	59	1.02	▼	1.90	▼	2	—	Ⓨ
Heating, ventilation and Air-conditioning: Station Communication Rooms	05 - 09	Construction	\$27,313,438	87	.59	▼	1.00	▲	1	—	ⓐ
Rehabilitate Underground Substation Hatchways	05 - 09	Construction	\$20,262,907	38	2.63	—	1.00	▼	0	—	Ⓨ
Modernize Greeley Substation	05 - 09	Construction	\$30,810,976	54	.09	▼	1.00	▲	0	—	Ⓨ
Cable Cranberry Tube, Ducts	05 - 09	Construction	\$33,853,500	65	1.28	▲	1.00	▼	0	—	Ⓡ
Control Cables 4 Substation Control Zones	05 - 09	Construction	\$48,455,261	78	.00	—	1.00	▼	8	▲	Ⓡ
Repl Negative Cables RKY	05 - 09	Construction	\$13,117,490	29	.00	—	1.00	—	0	—	ⓐ
Repl Neg Cable: 59-95 St 4AV	05 - 09	Construction	\$16,549,935	96	.27	—	1.00	▼	0	—	ⓐ
Circuit Breaker House East 180th Street	05 - 09	Construction	\$14,454,007	95	1.05	▼	1.00	—	0	—	ⓐ
Manhole Repairs 2 Locs	05 - 09	Construction	\$7,412,912	100	1.00	—	1.00	▼	0	—	ⓐ

**3rd Quarter 2011 Traffic Light Report  
Projects in Design and Construction**

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Description	Capital Plan	Phase	Total Project EAC	% Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Jay Street Substation, DC Feeders, Circuit Breaker House # 579	05 - 09	Construction	\$31,734,072	46	1.69	▲	1.00	▬	3	▲	Ⓡ
Rehabilitate 3 IRT Substation Enclosures	05 - 09	Construction	\$12,231,800	91	.58	▼	1.00	▲	0	▬	ⓐ
Heavy Shop Equipment	05 - 09	Construction	\$11,399,706	97	.00	▬	1.00	▬	0	▬	ⓐ
Yard CCTV	05 - 09	Construction	\$11,223,824	86	.70	▼	.96	▼	0	▬	ⓐ
Yard Fencing Priority 1: 8 Locations	05 - 09	Construction	\$29,692,193	70	1.16	▼	1.00	▬	0	▬	Ⓨ
Yard Fencing Priority 2: 5 Locations	05 - 09	Construction	\$21,417,783	59	.27	▼	.79	▲	0	▬	ⓐ
East New York Depot Repairs	05 - 09	Construction	\$17,192,000	38	.00	▬	1.00	▬	0	▬	ⓐ
Lifts: Stengel, Manhattanville	05 - 09	Construction	\$5,700,164	26	.00	▬	1.00	▲	6	▲	Ⓨ
Bus Lifts Various Locations	05 - 09	Construction	\$8,800,030	100	.00	▬	1.00	▲	0	▬	ⓐ
Depot Equipment	05 - 09	Construction	\$9,880,197	6	.00	▬	1.00	▼	0	▬	ⓐ
Priority Repairs: 3 Depots	05 - 09	Construction	\$19,730,517	0	.00	▬	1.00	▼	0	▬	ⓐ
Purchase 2 Ballast Regulators	05 - 09	Construction	\$7,736,048	9	.00	▬	1.00	▼	0	▬	ⓐ
Rubber Tire Vehicles 2008-2009	05 - 09	Construction	\$7,486,242	97	.00	▬	1.00	▲	16	▲	Ⓡ
Purchase 19 Diesel-Electric Locomotives	05 - 09	Construction	\$72,372,636	40	.00	▬	1.00	▬	0	▬	ⓐ
Fire Alarm/Sprinklers at 5 Locations	05 - 09	Construction	\$36,615,631	89	2.65	▲	1.13	▲	0	▬	Ⓡ
Employee Facilities Rehabilitation Parkchester-East 177th Street Station - Pelham Line	05 - 09	Construction	\$5,270,909	74	.36	▼	1.00	▲	0	▬	ⓐ
Employee Facilities Rehabilitation East 180th Street Station - White Plains Road Line	05 - 09	Construction	\$6,544,045	80	1.18	▼	1.00	▬	0	▬	ⓐ
DOS Roof Replacement Ph 2	05 - 09	Construction	\$19,653,186	57	.43	▼	1.00	▼	7	▲	Ⓡ
Passenger Transfer: Bleecker-Broadway/Lafayette Streets	05 - 09	Construction	\$77,196,335	72	.52	▲	.99	▼	0	▬	ⓐ
Rehabilitate 79th Street Station - West End Line	05 - 09	Construction	\$10,356,513	71	.82	▼	1.08	▲	0	▬	ⓐ
Rehabilitate Fort Hamilton Parkway Station - West End Line	05 - 09	Construction	\$22,685,764	68	1.33	▲	1.00	▲	0	▬	Ⓡ
Rehabilitate 62nd Street Station - West End Line	05 - 09	Construction	\$19,596,299	61	1.62	▼	.98	▼	0	▬	Ⓡ
Rehabilitate 9 Avenue Station - West End Line	05 - 09	Construction	\$21,645,836	83	1.08	▼	.98	▼	0	▬	Ⓨ



3rd Quarter 2011 Traffic Light Report  
Projects in Design and Construction

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Description	Capital Plan	Phase	Total Project EAC	% Complete	Contingency Index	Cont. Trend	Cost Index	Cost Trend	Schedule Variance (Months)	Sched. Trend	Traffic Light
<b>NYCT - New York City Transit Program</b>											
Station Work 50th Street Station - West End Line	05 - 09	Construction	\$9,442,144	61	.66	▲	1.00	▲	0	—	G
Station Work 55th Street Station - West End Line	05 - 09	Construction	\$9,603,251	62	.45	▲	1.00	▲	0	—	G
Replace Canopies 5 Stns BW7	05 - 09	Construction	\$14,143,827	56	.00	—	1.00	▲	0	—	G
Station Component Repairs	05 - 09	Construction	\$81,471,290	59	-.09	▼	1.05	▲	0	—	G
Gap Fillers Union Square Station Phase 3	05 - 09	Construction	\$26,038,421	95	.26	▼	1.00	▼	0	—	G
Tun Ltg Lex Av-5th Av QBL	05 - 09	Construction	\$11,988,175	96	1.00	—	1.00	▲	0	—	G
Fan Wrap-up work - Archer Avenue Line	05 - 09	Construction	\$67,842,116	90	.58	▲	1.00	▼	0	—	Y
Station Work at 4th Avenue Station on the Culver Line	10 - 14	Construction	\$10,867,667	43	.13	▼	1.00	—	0	—	G
Improvements at the Dyckman Street Station on the Broadway/7th Avenue Line	10 - 14	Construction	\$43,424,701	34	.23	▼	1.00	—	0	—	G
Rehabilitation of Smith-9th Station on the Culver Line	10 - 14	Construction	\$29,772,299	9	4.50	▼	1.00	—	0	—	G
Station Component Work	10 - 14	Construction	\$337,369,852	0	.00	—	1.00	▼	0	—	G
Replacement of Platform Edges at 3 Stations on the Eastern Parkway Line	10 - 14	Construction	\$7,085,909	46	.00	—	1.00	▲	0	—	G
ADA Accessibility at Forest Hills-71 Av Station on the Queens Blvd Line	10 - 14	Construction	\$19,788,402	2	.00	—	.91	▲	0	—	G
Water Condition Remedy	10 - 14	Construction	\$7,230,000	5	.00	—	1.00	—	0	—	G
Platform Replacement at 45 Rd-Court House Square on the Flushing Line	10 - 14	Construction	\$16,150,578	10	.00	—	1.00	▼	0	—	G
2011 Mainline Track Replacement	10 - 14	Construction	\$186,842,612	63	.00	—	1.00	▼	0	—	G
2011 Mainline Switch Replacement	10 - 14	Construction	\$44,854,566	76	.00	—	1.05	▼	0	—	G
Replace Tunnel Lighting from 4 Av-Church Ave on the Culver Line	10 - 14	Construction	\$31,292,219	36	.00	—	1.01	—	0	—	G
Rehabilitation of Deep Wells on the Crosstown Line	10 - 14	Construction	\$10,219,823	25	.52	▲	1.00	▼	0	—	G
Structural Rehabilitation / Flood Wall at the 148 St Yard	10 - 14	Construction	\$22,630,059	2	.00	—	1.00	—	0	—	G
Rehabilitate Emergency Exits at 125 Locations	10 - 14	Construction	\$11,300,000	66	.00	—	.39	▼	0	—	G
Rehabilitation of the Culver Viaduct (Underside) - Phase 3	10 - 14	Construction	\$40,381,843	4	.00	—	1.00	—	0	—	G



3rd Quarter 2011 Traffic Light Report  
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<b>NYCT - New York City Transit Program</b>											
Viaduct Repair on the Far Rockaway and Rockaway Lines	10 - 14	Construction	\$39,766,541	2	.00	—	1.00	—	0	—	Ⓞ
Structure Repair from Cypress Hills-130 St on the Jamaica Line	10 - 14	Construction	\$18,292,819	39	.00	—	1.00	—	0	—	Ⓞ
Overcoat Painting of 15 Bridges on the Brighton Line	10 - 14	Construction	\$8,162,361	73	.00	—	1.00	—	0	—	Ⓞ
Overcoat Painting from Cypress Hills-130 St on the Jamaica Line	10 - 14	Construction	\$19,229,809	19	.00	—	1.00	▲	0	—	Ⓞ
Modification of Signal Control Lines - Phase 4	10 - 14	Construction	\$25,790,000	0	.00	—	1.00	—	0	—	Ⓞ
Replace Solid State Signal Equipment at 13 Locations	10 - 14	Construction	\$34,285,881	0	.00	—	1.00	▲	0	—	Ⓞ
Install Station Time Signal Enhancements on the Lexington Avenue Line - Phase 2	10 - 14	Construction	\$50,823,872	0	.00	—	1.00	▼	0	—	Ⓞ
Modifications to Signal Control Lines - Phase 5	10 - 14	Construction	\$10,000,000	2	.00	—	1.00	—	0	—	Ⓞ
Upgrade Police Radio System	10 - 14	Construction	\$7,756,215	0	.00	—	.28	▼	0	—	Ⓞ
Install Public Address/Customer Info Screen Systems at 43 Stations	10 - 14	Construction	\$12,942,480	0	.00	—	.17	▼	0	—	Ⓞ
Replacement of Subway Radio Portable Units	10 - 14	Construction	\$6,235,527	95	.00	—	.96	▼	0	—	Ⓞ
Replacement of Copper Communications Cable	10 - 14	Construction	\$8,974,470	1	.00	—	1.00	—	0	—	Ⓞ
Rehabilitate 5 Substation Enclosures	10 - 14	Construction	\$15,165,038	5	-2.71	▲	1.00	—	0	—	Ⓞ
Modernize 10th Street Substation on the Culver Line	10 - 14	Construction	\$17,369,667	20	.30	▲	1.00	—	0	—	Ⓞ
Repair Power System Duct Bank from 141st Street to 148th Street on the Lenox Avenue Line	10 - 14	Construction	\$19,818,512	8	.20	▲	1.00	—	0	—	Ⓞ
Rehab Circuit Breaker Houses #292/#293 on the Nostrand Av Line	10 - 14	Construction	\$6,252,065	9	.00	—	1.00	—	0	—	Ⓞ
Reserve for Power Cable Duct Rebuilding	10 - 14	Construction	\$15,224,435	29	.00	—	.65	▲	0	—	Ⓞ
Upgrade 207 St Overhaul Shop Electrical System	10 - 14	Construction	\$18,724,771	15	.47	▼	1.00	—	0	—	Ⓞ
Upgrade 207 St Overhaul Shop Heating Plant	10 - 14	Construction	\$15,696,085	3	2.35	▲	1.00	—	0	—	Ⓞ
Rehab East New York Maintenance Shop Ventilation	10 - 14	Construction	\$4,441,242	2	.00	—	.86	▲	0	—	Ⓞ
Bus Rapid Transit - 3 Routes	10 - 14	Construction	\$6,911,001	3	.00	—	.28	▼	0	—	Ⓞ
2011 Track Force Account	10 - 14	Construction	\$35,000,000	75	.00	—	1.00	—	0	—	Ⓞ
Replace 2 Escalators at Roosevelt Av on the Queens Blvd Line	10 - 14	Design	\$11,543,644	0	.00	—	.81	—	1	—	Ⓞ

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<b>NYCT - New York City Transit Program</b>											
Station Renewal Work at 25 Stations	10 - 14	Design	\$361,637,691	0	.00	—	1.00	▲	0	—	Ⓞ
Station Work at Pelham Bay Park on the Pelham Line	10 - 14	Design	\$21,348,244	85	.00	—	2.35	▲	3	▲	Ⓜ
Renewal of Buhre Avenue Station on the Pelham Line	10 - 14	Design	\$13,478,684	85	.00	—	.65	▼	4	▲	Ⓜ
Renewal of Middletown Rd. Station on the Pelham Line	10 - 14	Design	\$13,445,419	85	.00	—	.69	▼	3	▲	Ⓜ
Renewal of Zerega Avenue on the Pelham Line	10 - 14	Design	\$13,432,637	85	.00	—	.69	▼	3	▲	Ⓜ
Renewal of Castle Hill Avenue Station on the Pelham Line	10 - 14	Design	\$29,828,844	95	.00	—	1.47	▲	3	▲	Ⓜ
Rehabilitation of 20 Avenue Station on the Sea Beach Line	10 - 14	Design	\$35,942,200	90	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation of 8 Avenue Station on the Sea Beach Line	10 - 14	Design	\$43,702,200	90	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation of Fort Hamilton Parkway Station on the Sea Beach Line	10 - 14	Design	\$49,942,200	90	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation of 18th Avenue Station on the Sea Beach Line	10 - 14	Design	\$46,062,200	90	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation of Kings Highway Station on the Sea Beach Line	10 - 14	Design	\$45,562,200	90	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation of New Utrecht Avenue Station on the Sea Beach Line	10 - 14	Design	\$48,262,200	90	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation of Bay Parkway Station on the Sea Beach Line	10 - 14	Design	\$52,302,200	90	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation of Avenue U Station on the Sea Beach Line	10 - 14	Design	\$48,762,200	90	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation of 86 St Station on the Sea Beach Line	10 - 14	Design	\$7,325,000	90	.00	—	.20	▼	0	—	Ⓞ
Ceiling Repair at 181 St and 168 St on the Broadway-7th Av Line	10 - 14	Design	\$38,500,000	90	.00	—	1.01	▲	3	▲	Ⓜ
ADA Accessibility at Kingsbridge Rd Station on the Concourse Line	10 - 14	Design	\$26,668,729	100	.00	—	.93	▼	1	—	Ⓞ
ADA Accessibility at 68 St-Hunter College Station on the Lexington Av Line	10 - 14	Design	\$52,500,149	40	.00	—	.78	▲	0	—	Ⓞ
ADA Accessibility at Hunts Point Ave Station on the Pelham Line	10 - 14	Design	\$17,114,362	100	.00	—	.61	▼	1	—	Ⓞ
ADA Accessibility at 57 St Station on the Broadway Line - Phase 2	10 - 14	Design	\$2,183,126	15	.00	—	.06	—	0	—	Ⓞ
ADA Accessibility at Ozone Park-Lefferts Blvd Station on the Liberty Line	10 - 14	Design	\$1,424,621	13	.00	—	.04	—	0	—	Ⓞ
2012 Mainline Track Replacement	10 - 14	Design	\$190,000,000	54	.00	—	1.00	—	0	—	Ⓞ
2012 Mainline Switch Replacement	10 - 14	Design	\$46,684,200	38	.00	—	1.00	—	0	—	Ⓞ

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<b>NYCT - New York City Transit Program</b>											
Replace Tunnel Lighting from Roosevelt Av-36 St on the Queens Blvd Line	10 - 14	Design	\$58,055,500	41	.00	—	.93	—	0	—	Ⓞ
Overcoat Painting from Portal-E 180 St on the White Plains Road Line	10 - 14	Design	\$35,969,200	80	.00	—	1.00	▲	2	—	Ⓞ
Rehabilitation of Retaining Wall on the Sea Beach Line	10 - 14	Design	\$42,110,000	90	.00	—	1.00	—	0	—	Ⓞ
Overcoat Painting from Broadway Junction-Cypress Hills on the Jamaica Line	10 - 14	Design	\$24,765,173	95	.00	—	.96	▼	0	—	Ⓞ
Modernize Signals and Interlockings on the Dyre Avenue Line	10 - 14	Design	\$264,425,200	6	.00	—	1.00	—	0	—	Ⓞ
Modernize Signal Interlocking at 34th Street on the 6th Avenue Line	10 - 14	Design	\$229,154,000	18	.00	—	.99	—	0	—	Ⓞ
Modernize Signal Interlocking at West 4th Street on the 6th Avenue Line	10 - 14	Design	\$239,338,800	8	.00	—	1.00	—	0	—	Ⓞ
Upgrade Heating, Ventilation and Air Conditioning (HVAC) Systems in Communication Rooms - Phase 2	10 - 14	Design	\$20,000,000	90	.00	—	1.00	—	3	▲	Ⓜ
Repair/Replace Underground Substation Hatchways - Phase 2	10 - 14	Design	\$3,814,348	100	.00	—	.24	▼	-2	▼	Ⓞ
Cabling Central Substation - 6th Avenue Line	10 - 14	Design	\$19,482,135	35	.00	—	1.00	—	1	—	Ⓞ
Rehab Circuit Breaker Houses #74/74A on the Jamaica Line	10 - 14	Design	\$24,239,100	36	.00	—	1.00	—	0	—	Ⓞ
Rehab Circuit Breaker House #403 on the Flushing Line	10 - 14	Design	\$14,888,815	50	.00	—	1.07	—	0	—	Ⓞ
Rehab Circuit Breaker House #146 on the Brighton Line	10 - 14	Design	\$751,000	59	.00	—	.11	▼	0	—	Ⓞ
Upgrade 207 St Maintenance Shop DC Power	10 - 14	Design	\$18,032,100	13	.00	—	.92	—	1	—	Ⓞ
Rehab 10 Bus Washers at 4 Depots	10 - 14	Design	\$21,620,000	100	.00	—	1.00	—	1	—	Ⓞ
Fire Sprinkler/Alarm Systems at 12 Employee Facilities	10 - 14	Design	\$17,859,651	56	.00	—	.60	▼	1	—	Ⓞ
Maspeth Warehouse Repairs	10 - 14	Design	\$1,395,200	26	.00	—	.15	—	0	—	Ⓞ
Perimeter Hardening at the Rail Control Center and 130 Livingston Plaza	10 - 14	Design	\$12,107,952	75	.00	—	1.01	—	0	—	Ⓞ
St. George Terminal Improvmnts	05 - 09	Construction	\$8,349,299	64	1.36	▲	1.16	▲	7	▲	Ⓜ
Structural Repairs at Eight Staten Island Railway Stations	10 - 14	Construction	\$11,710,172	0	.00	—	1.02	▼	0	—	Ⓞ



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<b>NYCT - New York City Transit Program</b>											
Rehabilitation of 8 Bridges and 1 Culvert on the Staten Island Railway.	10 - 14	Construction	\$26,778,800	2	.00	—	1.01	▲	1	—	Ⓞ
<b>LIRR - Long Island Rail Road Program</b>											
Escalator Replacement Program	05 - 09	Construction	\$5,770,042	85	.70	▲	1.00	▼	0	—	Ⓞ
PS Third Rail & Signals	05 - 09	Construction	\$9,629,124	94	.00	—	1.00	—	1	—	Ⓞ
Queens Blvd Track & Deck Rehabilitation	05 - 09	Construction	\$11,284,000	100	.00	—	1.00	—	-4	▼	Ⓞ
Junction Blvd Abutment PW	05 - 09	Construction	\$30,203,753	87	8.94	▼	1.00	—	0	—	Ⓞ
ERT Fire & Life Safety	05 - 09	Construction	\$116,299,355	0	.00	—	1.00	▼	0	—	Ⓞ
Life Cycle Maintenance Shop - Design and Construction	05 - 09	Construction	\$46,509,838	93	.19	▼	1.00	▲	0	—	Ⓞ
Babylon Car Wash	05 - 09	Construction	\$25,500,000	82	.66	▲	1.00	—	0	—	Ⓞ
Demolish / Construct 6 Substations	05 - 09	Construction	\$61,336,283	83	.11	▲	1.00	▼	2	—	Ⓞ
Substations Environmental Reme	05 - 09	Construction	\$10,227,000	49	.00	—	1.00	—	2	—	Ⓞ
Morris Park Environmental Stud	05 - 09	Construction	\$8,594,501	88	.00	—	1.00	—	2	—	Ⓞ
New Elevators-Queen Village St	05 - 09	Design	\$8,450,000	50	.00	—	1.00	—	0	—	Ⓞ
2011 Annual Track Program	10 - 14	Construction	\$55,100,000	89	.00	—	1.00	—	0	—	Ⓞ
Right of Way - Fencing installation	10 - 14	Construction	\$8,000,000	16	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation construction of three bridges on the Montauk Branch in Hampton Bays, Suffolk County.	10 - 14	Construction	\$26,200,000	0	.00	—	1.00	—	0	—	Ⓞ
Atlantic Avenue Viaduct - Phase IIb	10 - 14	Construction	\$66,700,000	96	1.00	▼	1.00	—	0	—	Ⓞ
Communication Pole / Copper Plant Replacement systemwide	10 - 14	Construction	\$7,000,000	40	.00	—	1.00	—	0	—	Ⓞ
Signal Normal Replacement Program	10 - 14	Construction	\$15,000,000	39	.00	—	1.00	—	0	—	Ⓞ
Shop Reconfiguration and Reliability Centered Maintenance Infrastructure Improvements	10 - 14	Construction	\$10,420,000	33	1.52	▼	1.00	▲	0	—	Ⓞ
3rd Rail - Protection Board replacement	10 - 14	Construction	\$9,200,000	17	.00	—	1.00	—	0	—	Ⓞ
3rd Rail - Aluminum Rail replacement	10 - 14	Construction	\$10,900,000	40	.00	—	1.00	—	0	—	Ⓞ

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<b>MNR - Metro-North Railroad Program</b>											
Vital Processor System (GCT)	05 - 09	Construction	\$3,804,592	85	.00	—	.59	▼	7	▲	Ⓡ
Croton-Harmon and Peekskill Station Improvements	05 - 09	Construction	\$14,759,737	24	.00	—	.96	▲	0	—	Ⓞ
Cortlandt Parking and Access Improvements	05 - 09	Construction	\$33,640,221	73	1.02	▲	.97	▲	0	—	Ⓞ
Tarrytown Station Improvement	05 - 09	Construction	\$35,902,582	65	.67	▼	.98	▲	0	—	Ⓞ
GCT Facilities Rehabilitation	05 - 09	Construction	\$23,751,808	100	1.13	▼	1.00	▼	0	—	Ⓨ
Replace/Repair Undergrade Brid	05 - 09	Construction	\$26,196,926	89	.00	—	.99	▼	0	—	Ⓞ
Overhead Bridge Program-E of H	05 - 09	Construction	\$5,851,560	25	.00	—	.97	▼	0	—	Ⓞ
Tagging Relays - H&H	05 - 09	Construction	\$12,366,708	93	.00	—	.98	—	4	▲	Ⓡ
GCT Leaks Remediation	05 - 09	Design	\$1,973,033	75	.00	—	.82	▲	0	—	Ⓞ
Bronx Stations/Capacity Imp	05 - 09	Design	\$12,026,770	10	.00	—	.89	▲	0	—	Ⓞ
Mainline/High Speed Turnout Replacement	10 - 14	Construction	\$69,637,000	25	.00	—	1.00	—	0	—	Ⓞ
Grand Central Terminal Turnout / Switch Renewal	10 - 14	Construction	\$13,531,500	40	.00	—	.99	—	0	—	Ⓞ
Annual Track Program	10 - 14	Construction	\$13,000,000	20	.00	—	1.00	—	0	—	Ⓞ
West of Hudson Annual Track Program	10 - 14	Construction	\$21,184,000	25	.00	—	1.00	—	0	—	Ⓞ
Replace Fiber / Communication & Signals Cables	10 - 14	Construction	\$8,338,000	3	.00	—	.95	▼	0	—	Ⓞ
Replace 3rd rail infrastructure in the Park Avenue Tunnel	10 - 14	Construction	\$6,000,000	0	.00	—	1.00	—	0	—	Ⓞ
Harmon Shop Replacement program	10 - 14	Construction	\$289,758,606	0	.00	—	1.00	—	0	—	Ⓞ
<b>B&amp;T - Bridges and Tunnels Program</b>											
Concrete Anchorage Repairs	05 - 09	Construction	\$11,100,000	80	1.02	▼	1.00	—	0	—	Ⓨ
Structural Steel Repairs at The Suspended Spans and Tower Spans of the Throgs Neck Bridge	05 - 09	Construction	\$66,287,216	0	.00	—	1.00	—	0	—	Ⓞ
Anchorage and Tower Protection	05 - 09	Construction	\$11,807,782	45	1.86	▲	1.00	—	0	—	Ⓞ
Elevated and on Grade Approach Deck Replacement - Whitestone Bridge	05 - 09	Construction	\$209,519,160	84	-.18	▼	1.00	▲	0	—	Ⓞ
New Toll Plaza - Phase 1	05 - 09	Construction	\$13,795,225	100	.00	—	1.00	—	0	—	Ⓞ

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<b>B&amp;T - Bridges and Tunnels Program</b>											
Cable and Anchorage Investigat	05 - 09	Design	\$8,178,426	90	.00	—	1.00	—	0	—	Ⓞ
Service & FE Building Rehab	05 - 09	Design	\$17,324,490	99	.00	—	1.00	—	0	—	Ⓞ
Rehabilitation of the Concrete Substructure and Underwater Work - Cross-Bay Bridge	10 - 14	Construction	\$20,114,140	20	.11	▲	1.00	—	0	—	Ⓞ
Miscellaneous Structural Rehabilitation - Throgs Neck Bridge	10 - 14	Construction	\$22,043,388	0	.00	—	1.00	—	0	—	Ⓞ
Deck Replacement - the Queens Elevated and On-Grade Approach of the Bronx-Whitestone Bridge	10 - 14	Construction	\$291,826,512	0	.00	—	1.00	—	0	—	Ⓞ
Replacement of the Upper Level Sidewalk, Curb Stringers, and Roadway Lighting - Henry Hudson Bridge	10 - 14	Construction	\$39,154,266	19	.32	▲	1.00	—	0	—	Ⓞ
Replacement of the wearing course on the orthotropic deck sections of the Robert F. Kennedy Bridge	10 - 14	Construction	\$12,595,804	82	.31	▲	1.00	—	0	—	Ⓞ
Phase B of the Rehabilitation of the Orthotropic Deck - Throgs Neck Bridge	10 - 14	Construction	\$51,963,657	6	.00	—	1.00	—	0	—	Ⓞ
Toll Plaza Improvements: Eastbound and Westbound Ramps, Eastbound Mainline Rehabilitation - Verrazano-Narrows Bridge	10 - 14	Construction	\$105,822,360	0	.00	—	1.00	—	0	—	Ⓞ
Second Generation E-ZPass In-Lane Subsystem Evaluation and Modernization	10 - 14	Construction	\$34,999,059	30	.00	—	1.00	—	0	—	Ⓞ
Replacement of the Electrical Switchgear and Equipment - Brooklyn-Battery Tunnel	10 - 14	Construction	\$56,736,825	24	1.04	▼	1.00	—	0	—	Ⓞ
Hazardous Materials Abatement - Agency-Wide	10 - 14	Construction	\$8,650,797	0	.00	—	1.00	—	0	—	Ⓞ
Traffic Enforcement Support	10 - 14	Construction	\$7,251,246	0	.00	—	1.00	—	0	—	Ⓞ
Paint - Bronx Approach, Throgs Neck Bridge	10 - 14	Construction	\$63,352,775	6	.00	—	1.00	—	0	—	Ⓞ
Paint - Structural Steel of Bronx and Queens Tower Fender Systems - Throgs Neck Bridge	10 - 14	Construction	\$8,306,173	99	.00	—	1.00	—	0	—	Ⓞ
Paint - Towers below the Roadway Level - Verrazano-Narrows Bridge	10 - 14	Construction	\$30,356,011	45	.00	—	1.00	—	0	—	Ⓞ

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<b>B&amp;T - Bridges and Tunnels Program</b>											
Tunnel Ventilation Building Electrical Upgrade: Replace Electrical Switchgear and Fan Motor Control Equipment - Queens Midtown Tunnel	10 - 14	Design	\$70,422,157	100	.00	—	1.00	—	0	—	ⓐ
<b>MTA Bus Program</b>											
Roof/Ventilation LaGuardia	05 - 09	Construction	\$6,979,407	71	.00	—	1.00	▼	4	▲	Ⓡ
Elec Upgrd/Emer Gens 6 Depots	05 - 09	Construction	\$13,316,192	21	.26	▲	1.00	▼	0	—	ⓐ
Upgrade Parking - JFK & BP	05 - 09	Construction	\$9,764,776	27	.00	—	1.00	▼	0	—	ⓐ
Roof/Ventilation Far Rockaway	05 - 09	Construction	\$6,930,900	81	.00	—	1.00	—	1	—	ⓐ
Roof/Ventilation Baisley Park	05 - 09	Construction	\$8,504,840	69	.00	—	1.00	—	0	—	ⓐ
Roof/Ventilation JFK	05 - 09	Construction	\$9,542,474	5	.00	—	1.00	—	0	—	ⓐ
Fueling Lane & Bus Wash LG	05 - 09	Construction	\$2,392,439	0	.00	—	1.00	▲	0	—	ⓐ
Addnl Fuel Capacity BP JFK LG	05 - 09	Construction	\$3,627,169	2	.00	—	.42	—	13	▲	Ⓡ
Fire Protection JFK LG BP ECH	05 - 09	Construction	\$10,386,653	0	.00	—	.88	—	0	—	ⓐ
Environmental Remediation Rsrv	05 - 09	Design	\$17,389,000	70	.00	—	1.00	▼	0	—	ⓐ

**Project No. A36068, 69, 70****Approved Plan: \$57.9M****Three Stations Rockaway Line:****Original Substantial Completion: Feb 2011****Beach 90<sup>th</sup>, 98<sup>th</sup>, 105<sup>th</sup> Streets****Revised Substantial Completion: Dec 2011****A, S Lines****Phase: Construction (96% complete)****Project Description**

Rehabilitation of three stations on the Rockaway Line includes the reconstruction of platforms, rehabilitation of control areas, stairs and operation facilities, upgrade of electrical and communication systems, painting and installation of art work.

**Problem**

**Schedule:** The Third Quarter 2011 Traffic Light Report shows a schedule variance of 3 months for all three Rockaway Line Stations. The 3-month schedule delay was previously addressed in the June 2011, Second Quarter Agency one page report, but not identified within the Second Quarter Traffic Light report itself. Subsequently, the forecast construction delay of 3 months, which extends Substantial Completion from September to December 2011, has been identified in the September 2011 Traffic Light Report.

**Contingency:**

Expended project contingency exceeds the pace of total project progress to date.

**What is Being Done**

**Schedule:** The contract duration was extended beyond its original completion date due to limitations in working close to Long Island Power Authority's (LIPA) high voltage power cable supported on the north side of the Rockaway Line structure. LIPA evaluates and grants power outages on a daily basis. Limited outages were granted during harsh winter months and no outages were given during hot summer months due to high demand for electricity. Work on effected areas commenced again in October 2011.

**Contingency:**

NYCT is evaluating the impact of this delay on project support costs. If needed, a budget modification will be prepared.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including stated problem and actions taken by the agency.

**All-Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.



<b>Project No. A35985-86, C34761</b>	<b>Total Project EAC: \$66.6 M</b>
<b>Station Rehab East 180<sup>th</sup> Street</b>	<b>Original Substantial Completion: January 2012</b>
<b>Station &amp; Employee Facilities</b>	<b>Current Substantial Completion: January 2012</b>
<b>ADA Accessibility</b>	<b>Phase: Construction (92% complete)</b>

**Project Description**

This project will rehabilitate the East 180<sup>th</sup> Street Station on the White Plains Road Line. The station will be made ADA Accessible with the installation of elevators and all ADA progressive elements and the employee facilities will be rehabilitated. The façade of the historic administration building will be restored.

**Problem**

**Contingency:** Expended project contingency exceeded pace of total project progress to date.

**What is Being Done**

**Contingency:** Additional Work Orders have been issued for the Employee Facilities portion of this project for facilities roof structure and drainage system, which caused higher expenditure of contingency funds for this portion of the work.

Review of the remaining work in all parts of this project indicates that the remaining contingencies for all parts of this project are sufficient to complete the project. This project is on schedule to achieve Substantial Completion in January 2012.

**IEC Comment**

**Budget & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.

**Project No. A35942, 43, 29**  
**Bleecker Street Station**  
**Lexington Av 6 line**

**Total Project EAC: \$134.2 M**  
**Original Substantial Completion: Nov 2011**  
**Current Substantial Completion: June 2012**  
**Phase: Construction (80% complete)**

### Project Description

This project will rehabilitate the historic Bleecker Street Station in Manhattan on the IRT Lexington Avenue Line. Station elements will be upgraded to a state of good repair. This project will provide full ADA Accessibility at the Bleecker Street Station and the Broadway/Lafayette Street Station on the IND 6<sup>th</sup> Avenue Line, both identified as ADA Key Stations. This project will also construct a new transfer connection between the two stations.

### Problem

**Contingency:** Expended project contingency exceeds the pace of total project progress to date.

**Schedule:** The Third Quarter 2011 Traffic Light Report identifies no schedule variance, however subsequent to September 30, 2011 NYC Transit has forecast a 3 month delay in Substantial Completion, slipping from March to June 2012.

### What is Being Done

**Contingency:** Of all companion parts of this project, expended contingency related to the ADA Accessibility portion has exceeded its progress to date. Need to relocate tunnel lighting equipment and electrical services necessary to construct the elevator shaft to the Broadway/Lafayette Street Station caused higher expenditure of contingency funds for the ADA portion of the work.

Review of the remaining work in all three parts of this project indicates that the overall expended project contingency is far below the pace of total project progress. Therefore the remaining contingencies are sufficient to complete the project.

**Schedule:** Subsequent to the September 30, 2011 project update, reported in the Third Quarter Traffic Light Report, the contract duration was extended due to delay in relocating the 20" water main at Houston Street and protracted review and approval of the terra cotta material that has long lead time to fabricate.

### IEC Comment

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.

**Project No. A35981**  
**ADA Accessibility, Kings Highway**  
**Brighton Line**

**Project Total EAC: \$11.4 M**  
**Original Completion: December 2011**  
**Current Completion: December 2011**  
**Phase: Construction (99% complete)**

### Project Description

This project will provide ADA Accessibility at Kings Highway Station on Brighton Line in Brooklyn. New ADA elevators and all progressive ADA elements will be installed in compliance with accessibility requirements.

### Problem

**Budget:** Project EAC has increased from \$10.1M to \$11.4 M.

### What is Being Done

**Budget:** The \$1.3M increase in EAC is for the construction support cost for the project. At the time of award construction support costs were under review in order to seek potential reductions, and it was agreed that the construction support cost would be reevaluated and separate budget action would be initiated to adjust the support cost. Project Management office has processed a revised support cost estimate and initiated the Budget Modification Staff Summary in July 2011 to fund the total construction support cost for the project.

### IEC Comment

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.

**Project No. A-35785-88, 97, A35802, 03  
A35886, C34794****Seven Stations West End Line**

71<sup>st</sup> St., 79<sup>th</sup> St., 18<sup>th</sup> Av, 20<sup>th</sup> Av, 25<sup>th</sup> Av,  
Bay Parkway, Bay 50<sup>th</sup> St,  
Elevated Line Structure, D Line

**Total Project EAC: \$105.0M****Original Substantial Completion: Jan 2012****Current Substantial Completion: Jan 2012****Phase: Construction (75% complete)****Project Description**

This project will rehabilitate the seven stations and provide for ADA Accessibility at Bay Parkway Station on the BMT West End Line in the borough of Brooklyn.

**Problem**

**Cost:** Increase in EAC from \$10.6M to \$11.6M at the 25<sup>th</sup> Avenue Station.

**Contingency:** Expended project contingency at Bay Parkway Station exceeds pace of total project progress to date.

**What is Being Done**

**Cost:** Increase in EAC at 25<sup>th</sup> Avenue Station is due to redistribution of Construction Administration cost of the project. Overall cost of the Construction Administration for the project remains unchanged. The remaining Construction Administration funds for all parts of this project are sufficient to complete the project.

**Contingency:** Several Additional Work Orders have been issued for the Bay Parkway Station including refurbishment of the token booth, drain connections to sewer line, exterior terra cotta restoration and modification to the station façade; these have caused expended contingency to exceed the pace of construction progress. Additional deteriorated platform supports were discovered after concrete removal and following inspections by Maintenance of the Way Engineering. This will increase the type and quantities of repairs listed in the elevated line structure portion of the contract, requiring additional contingency funds.

CPM-Stations Division is reviewing the remaining work and contingencies in all companion projects in this contract to determine the impact, if any, to the total project budget and schedule.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the Agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.

**Project No. C-34892****Signal Room Fire****Suppression, Phase 1**

Total Project EAC: \$20.5 M

Original Substantial Completion: April 2011

Current Substantial Completion: December 2011

Phase: Construction (78% complete)

**Project Description**

This project requires an Inergen Fire Suppression system installation at various Signal facilities.

**Problems**

**Schedule:** The substantial completion has slipped 3 months from September 2011 to December 2011. The Third Quarter Traffic Light Report identifies a schedule variance of 3 months. The delay was forecast by NYCT in June's Second Quarter Agency one page report when the extension of time was under review and is further described in this quarter's report. Subsequent to this reporting period, the forecast completion date slipped one month to January 2012.

**Budget:** Contingency exceeds pace of total project progress.

**What is Being Done**

**Schedule:** An extension is under review with the change order as described below.

1. Additional changes in the door hardware per User's requests and field conditions.
2. Unavailability of Fire Suppression room at West 4th Street station per contract. We had to look for alternate location, and provide heat, light etc. under AWO
3. Limited access to the facilities due to 24/7 operations of Signal towers.
4. Extended delays for resuming work at Concourse Yard facility due to ongoing contract.

**Budget:**

Several AWOs were issued to address the above issues. Budget modification for additional TA labor and Contingency is in process.

Additional TA labor is required since the TA Services were added during bid process, and the budget was not adjusted at that time to reflect additional funds required. The Staff Summary at the Award indicated that the additional TA labor funds will be addressed after 50% of construction. Budget modification for additional TA labor and contingency (approximately \$2.5M) is in process to fund for additional TA labor and change orders.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the Agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.



**Project No. 32370**  
**Fulton Street Duct Reconstruction**  
**Ryder's Alley – Front Street**  
**8<sup>th</sup> Ave – Cranberry Tube, Canarsie Line**

**Total Project EAC: \$34.0M**  
**Original Completion: February 2012**  
**Current Completion: December 2012**  
**PHASE: Construction (65% complete)**

**Project Background**

This project is a joint venture between New York City Department of Design and Construction (DDC), Con Edison, Empire City Subway (ECS), Department of Environmental Protection (DEP), Department of Highways and Incidental Structures (HW), Division of Traffic, Bureau of Signals and Street Lighting (TF) and New York City Transit (NYCT).

Overall, The New York City Department of Design and Construction (DDC) is in charge of this project.

**Project Description**

This project involves in replacement of existing duct bank from Ryder's Alley to Cliff and Fulton Street intersection and installation of 16 new ducts from Cliff Street to Front Street Manhattan shaft as well as construction of three (3) new manholes and repairs of seven (7) existing manholes.

**Problems**

**Cost / Contingency**

The Resident Engineering Services (REI) for this project were let for bid with a duration of 24 months; however, the construction contract has a duration of 36 months. Therefore, there was a shortfall of 12 months plus three months closeout in the REI services contract. The shared participation REI cost for NYCT (22.06%) on the 15-month extension was in the amount of \$777,616.73.

Subsequent to the September reporting period and due to the above, the Substantial Completion date slipped from September 2012 to December 2012. This delay is subject to overall schedule changes for all other city agencies involved in the project.

**What is Being Done**

NYCT executed an AWO for \$777,616.73, as agreed on July 15, 2011 per Memorandum of Understanding among the participating agencies.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the agency.



**Project No. P-36208**

**Replacement of Battery and Control Cables at 4 Substation Control Zones in Manhattan, Brooklyn and Queens**

**Total Project EAC: \$48.1 M**  
**Original Completion: December 2010**  
**Current Completion: September 2012**  
**PHASE: Construction (82% complete)**

**Project Description**

This project will provide safe and reliable operation of remotely and locally controlled equipment installed in Substations, Fan Plant and Circuit Breaker Houses. The work includes installation of new battery and control cables with control and battery terminal boxes in various substations, control rooms, fan rooms and circuit breaker houses.

**Schedule/Cost Change**

The Substantial Completion date has been delayed by 9 months from January to September 2012 due to following:

- Due to emergency work at 53<sup>rd</sup> Street, holiday embargo and winter seasons - our MOW in-house contractor Gazebo is not available to do the duct work on Kent Ave (Brooklyn) from January to March 2012 – total delay of 3 months
- Gazebo will begin work at Kent Ave (Brooklyn) in April - Installing 8 new ducts approximately 3720 L. Ft. which will take about 8 weeks. Work will be completed in May resulting additional 2 months delays - from April to May 2012
- Our contractor (MOW/Cables) will pull Battery and Control cables (splicing, terminating and testing) which will take approximately 8 weeks. Delay additional 2 months - June to July 2012
- Perform pre-final inspections and address punch list items. Declare Beneficial Use (BU) and Substantial Completion (SC) by September 30, 2012. Delay 2 more months - from August to September 2012

**Problems**

The existing ducts in Zone 24 (In Brooklyn) at Kent Ave between MH 3 and MH 4 are blocked and collapsed. In order to install Battery and Control cables up to the South 6<sup>th</sup> / Broadway substation, it is necessary to build 8 new ducts.

**What is being done**

A Budget Modification is being prepared to transfer funds in the amount of \$854,743 to TA Labor for this contract, which is the cost of building eight new ducts by Gazebo Contracting Inc, NYCT in-house operating contractor. No additional funding is requested from the Authority-wide contingency.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the agency.

**Project No. P 36316**  
**Replacement of DC Feeder System in Jay Street**  
**Substation, Construct and Equip New Concord**  
**CBH-579 in Brooklyn**

**Total Project EAC: \$35.9M**  
**Original Completion: Sept 2011**  
**Current Completion: May 2012**  
**PHASE: Construction (46%complete)**

### Project Description

This project involves the rehabilitation of the substation building at 212 Jay Street, construction of new circuit breaker house 579 (to replace existing), furnish and install new DC switchgear in Jay Street Substation and CBH 579, replace 16 positive feeders and 14 negative feeders (which includes 4 negative feeders each to the middle of Cranberry and Rutgers tubes).

**Problem:** The Substantial Completion date has slipped 3 months from February 2012 to May 2012

### Schedule Change

Contractor was granted 173 working days of extension of time revising the substantial completion from September 2011 to May 14, 2012. Subsequent to the September Traffic Light Report, the schedule was further revised from May to September 2012 due to following reasons:

1. The phasing plan of the contract required NYCT Power Dept. to take Jay Street Substation out of service for construction. NYCT could not shutdown the substation due to operational contingencies caused by (1) Fire at Joralemon-Willow Place substation in Brooklyn. (2) Shutdown of Cliff Street Substation in Manhattan due to installation of new ducts at Fulton Street.
2. This Project requires 44 weekend diversions on the A and F lines. In addition to the above delay, the 12 weekends General Orders were canceled due snow emergency and unavailability of work trains and crews. These diversions were rescheduled up to May 2012.
3. The forecast for substantial completion is further revised from May to September 30, 2012 due to (a) Re-sequencing of General Orders by Operation Planning. Note that the projected last General Order is schedule at the end of July 2012. (b) The Construction Manager's office needs two more months for conducting pre-final, final inspections and correction of remaining punch list.

### What is being done

- Contractor has been directed to add more manpower during diversions to mitigate delay.
- In-house Capital Strategic Planning and Scheduling has scheduled remaining General Orders from January to July 2012.
- To mitigate last months of delay – CM office will address the punch list issue while contractor is doing the work.

### IEC Comment

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the agency.



**Project No. V-31987**  
**RUBBER TIRE VEHICLES**  
**2008-2009**

**Total Project EAC: \$7.5M**  
**Original Completion: July 2011**  
**Current Completion: November 2012**  
**Phase: Construction (97% complete)**

**Project Description**

This Project was submitted for the replacement of rubber tire vehicles in the NYCT non revenue fleet under the 2005-2009 capital plan.

**Problem**

**Schedule:** Completion slippage of 16 months from 7/31/11 to 11/30/12.

1. Original plan was delayed and reduced from \$13.8 million to \$7.5 million.
2. As the plan developed, extremely competitive pricing resulted in funds being available to order four additional vehicles within the planned budget.
3. These vehicles were ordered late in 2010 - two have been delivered and the remaining two are expected during 2012.

**What is being done?**

**Schedule:**

1. The last remaining vehicles will be delivered in 2012 allowing for close out of the program.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the agency.

**Project No. C-34895****Total Project EAC: \$18.0 M****New Fire Alarm Systems****Original Substantial Completion: July 2011****130 Livingston & PCC****Current Substantial Completion: Dec 2012****Phase: Construction (84% complete)****Project Description**

This contract was awarded on March 26, 2009 to EJ Electrical Installation Co. (EJ Electric) for replacement of the fire alarm system in both buildings: Power Control Center, 333 West 53 Street, Manhattan and 130 Livingston Street, Brooklyn.

**Problem**

**Cost / Schedule / Contingency:** The Third Quarter 2011 Traffic Light Report identifies no schedule variance, however subsequent to September 30, 2011 NYCT forecast's Substantial Completion slipping 3 months from September 2012 to December 2012. EAC was increased from \$16.8M to \$18.0M mainly for the problems explained below:

1. The fire alarm riser design for the staircases A & D at 130 Livingston Building was changed due to New York state code, which did not allow penetration from stair A to D. The Designer (URS) is of the opinion that this staircase is one entity, since there is already a stand pipe unit penetrating the floors. Therefore their design is "accurate". NYCT is the Authority Having Jurisdiction and interprets this as two different staircases.
2. During the field surveys it was revealed that purge system actuators at 130 Livingston Street were substantially different than what was shown in the contract documents. Some of the dampers were defective, inoperable and not reachable. In order to comply with the new code for Fire Alarm systems, some of the existing dampers had to be repaired, some to be changed and new dampers must be added to the system.
3. In order to finish the additional unforeseen conditions above, additional funds were needed for in-house construction administration, TA Labor, and contingency.

**What is being done?**

**Cost / Schedule / Contingency:**

1. Cost agreement with the contractor could not be reached for the A & D stairs, which resulted in the work being awarded to In-House construction. In-House forces are in the process of completing the installation by December 2011.
2. The Scope of work is being developed for purge system actuators and dampers. The negotiations will be held and additional work orders will be issued to the Contractor to complete the project by September 2012.
3. A budget modification was approved in November 2011 for additional Contingency, TA Labor and In-House construction administration, which brings the EAC to \$18.0M. This amount should be satisfactory to complete construction.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.

**Project No. C-34785  
DOS Facility Roof Repair and Replacement  
Jerome Yard Maintenance Facility Phase 2****Total Project EAC: \$19.7M  
Original Completion: Nov. 2011  
Current Completion: July 2012  
PHASE Construction 70% complete****Project Description**

This project is the second phase of an ongoing initiative to repair facility roofs at various locations system wide. The eight locations included in this project are approximately 18 to 80 years old. The existing roofs at most of the locations are deteriorated beyond repair and need replacement. They have served their useful life. The purpose of this project is to repair or replace the roofs of various Department of Subways' buildings.

The work under this contract consists of the roof repair and replacement at eight NYCT Facilities in four boroughs of New York City. One of the major roofs to be replaced under this contract is at Jerome Yard Car Maintenance Facility. This contract also calls for the repair of the supporting structures at some of the locations.

**Schedule/Cost Change**

Currently 7 out of 8 locations included in the project achieved Beneficial Use. The forecast Substantial Completion has been revised to 7/31/2012 due to delay caused by the lack of site access at Jerome Yard Car Maintenance Facility. The contractor is claiming additional cost for the lost time.

**Problems**

The contractor completed work at 7 of 8 locations. In order to complete work at the remaining location at Jerome Yard Car Maintenance Facility as specified in the contract documents, the contractor needed a permit to utilize the adjacent NYC DEP property for purposes such as site access, equipment set-ups, waste transportation, and construction material storage. After contract was awarded on 3/31/2010, the contractor applied for the permit but it was not granted. Do we know why? Subsequently, NYCT modified the construction plan and provided access to perform the work from inside the shop.

**What is Being Done**

After NYC-DEP rejected the permit to the contractor, NYCT Car Equipment Department granted an access to the work areas from inside the shop. The power for two middle tracks is shutdown and temporary construction staging and storage areas are provided to the contractor. The contractual work is progressing and currently about 70% complete.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period

**Project No. A-35887****Five Stations West End Line**

9<sup>th</sup> Av, Fort Hamilton Pkwy, 50<sup>th</sup>, 55<sup>th</sup>,  
62<sup>nd</sup> Streets, Elevated Line Structure  
D Line

**Total Project EAC: \$105.0M****Original Substantial Completion: Jan 2012****Current Substantial Completion: Jan 2012****Phase: Construction (57% complete)****Project Description**

This project will rehabilitate the 5 stations on the BMT West End Line in the borough of Brooklyn. Work will include the restoration of the mezzanine and control areas, rehabilitation of the platform and replacement of platform edges, stairs, painting of the station, construction of new employee facilities, and upgrade of lighting and communication systems. This project will also repair the structural deficiencies of the elevated line structure between 9<sup>th</sup> Avenue and 62<sup>nd</sup> Street Stations.

**Problem**

**Contingency:** Expended project contingencies at Fort Hamilton Parkway and 62<sup>nd</sup> Street Stations exceeds pace of total project progress.

**What is Being Done**

**Contingency:** Several Additional Work Orders, (AWO) have been issued for the Fort Hamilton Parkway Station to address the structural deficiencies, storm water and track drains and wall replacement at north mezzanine and for 62<sup>nd</sup> Street Station to address canopy roof rafter replacement, deteriorated floor frame of the north mezzanine and structural steel repairs. The AWO's caused higher expenditure of contingency funds for these portions of the project. Also, additional deteriorated platform supports were discovered after concrete removal and following inspections by Maintenance of the Way Engineering. This will increase the type and quantities of repairs listed in the elevated line structure portion of the contract requiring additional contingency funds.

CPM-Stations Division is reviewing the remaining work and contingencies in all companion projects in this contract to determine the impact, if any, to the total project cost and schedule.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the Agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.

**Project No. A36007-10, 16****Five Stations Pelham Line**Buhre Av, Middletown Rd, Zerega Av,  
Castle Hill Av, Pelham Bay Park Stations**Total Project EAC: \$96.8 M****Original Award Date: April 2012****Current Award Forecast: Nov 2012****Phase: Final Design (65% complete)****Project Description**

This project will redesign four of the stations on the Pelham Line as Renewals with the exception of the Pelham Bay Park station that will be redesigned as a component project. This project will repair all major structural deficiencies and improve architectural finishes. Lighting will be upgraded. At Castle Hill Avenue Station, the mezzanine will be reconstructed. Stations will be painted and artwork will be installed at Renewal stations.

**Problem**

**Cost:** Estimates at Completion (EAC) increased from \$8M to \$22M at Pelham Bay Park and from \$26.6M to \$31.7M at Castle Hill Avenue Stations.

**Schedule:** The Third Quarter 2011 TLR shows a schedule variance of 3 months for the Pelham Line Stations. The 3 month schedule delay was previously addressed in the Second Quarter Agency report, in June 2011, when NYC Transit forecast a total delay of 6 months for final design completion, which slipped from November 2011 to May 2012. The design delay also extends NYC Transit's forecast construction award to November 2012.

**What is Being Done**

**Cost:** These stations were originally designed as full station rehabilitations. Budget for these stations was reduced to Renewal level as a cost saving measure. NYCT is redesigning these stations as renewals with the exception of the Pelham Bay Park Station that will be redesigned as a component project. Total construction budget for all locations has been reallocated based on revised scope for each location. The overall budget for the five stations remains unchanged.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the agency.

**Project No. A36193****Total Project EAC: \$38.0 M****Brick Arch Ceiling Repairs****Original Design Completion: Sept 2011****168th & 181st Street Stations****Current Design Completion: Feb 2012****Broadway Line****Phase: Final Design: (65% complete)**

### Project Description

This project will replace the over the track portion of the historic brick arch ceilings at 168<sup>th</sup> Street and 181<sup>st</sup> Street Stations on the Broadway Line in upper Westside of Manhattan. Project includes installation of an armature to support the ceiling drainage system and station lighting as well as repair of columns and beams at low galleries.

### Problem

**Schedule:** A 3 month schedule variance is identified in the Third Quarter 2011 Traffic Light Report, with Design completion slipping from September to December 2011. Subsequently, as noted in this report, the Design completion date is currently forecast as February 2012.

### What is Being Done

**Schedule:** The design and construction award commitments dates have been extended to complete the additional State Historic Preservation Office requirement related to the ceiling medallions. In addition the design team is asked to explore the possibility of substituting the Glass Fiber Reinforced Polymer (GFRP), specified in the design, with less flammable material. The design team is reviewing Glass Fiber Reinforced Concrete which will require revision to the anchoring system and the finishing details.

### IEC Comment

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.

**Project No. C43041  
Upgrade HVAC Systems in  
Communication Rms Phase II  
Various Locations, Brooklyn**

**Total Project EAC: \$4.5 M  
Original Forecast Award: December 2011  
Current Forecast Award: April 2012  
Phase: Design (92% complete)**

**Project description:**

This project is part of three priority groups, with a total budget of \$20M that will install HVAC equipment in existing communication rooms in seven stations in Brooklyn. The air conditioning and ventilator equipment will create a cooler and thermostatically stable operating environment in the communication rooms so that heat sensitive communication equipment is not placed at risk of overheating.

**Problem**

**Schedule:** Delay in design completion of 3 months from September to December 2011. Subsequently construction award will be delayed from December 2011 to April 2012.

**What is Being Done**

**Schedule:** Final design was placed on hold to resolve access for maintenance concerns and to explore the possibility of reducing heat loads in the communication rooms. Design has commenced and is scheduled for completion in December 2011. Construction award for the Brooklyn Seven Location (C43041) has been postponed until April 2012.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problems and actions taken by the agency.

**SIRTOA Project No. C80269  
St. George Terminal Improvements  
Floor Repair/Replacement Project****Total Project EAC: \$7.4M  
Original Completion: Jan. 2011  
Current Completion: May 2012  
PHASE Construction 64% complete****Project Background**

In 2007, a project was undertaken to refurbish the floor at the fare array area within the St. George Ferry Terminal at the Staten Island Railway. During demolition of the surface, the concrete floor slab below was determined to be structurally inadequate to carry the anticipated loading. The initial project was closed out and this new sub project was created.

**Project Description**

This contract is for the partial rehabilitation and replacement of the St. George Terminal, Staten Island Railway (SIR) in Staten Island. It includes replacing portions of the existing concrete slab, scarifying portions of the existing slab, and installing new acrylic resin floor topping over the concrete slab in all reconstructed areas among other things. To minimize inconvenience to customers, the contract requires construction in phased areas.

**Schedule/Contingency**

The Substantial Completion date is revised to May 2012 due to additional work. Under the current contract modification, the contractor is seeking approximately \$810K and an excusable 173 working day time extension and no impact cost. The NYCT Scheduler has identified an excusable 162 working day time extension. NYCT Estimators are estimating \$556K to do the work.

**Problems**

The contract calls for portions of the existing concrete slab areas to be scarified and finished with acrylic resin topping. During construction as the top of the structural slab was being scarified, the floor was found to be in visually decrepit condition; with the underside of slab exhibiting cracks. Accordingly, core samples of the concrete slab were taken in those areas to determine compressive strength as measured in psi. NYCT current standard is 3,000 psi and 4,000 psi is typically specified. The NYCT standard at the time of original construction (circa 1955) was 2,500 psi; and it was anticipated that the existing slab would have a similar compressive strength. However, laboratory test results showed that the existing concrete has a compressive strength only 1,500 to 1,800 psi which is far below the current NYCT standard. Accordingly, the existing floor slab in these areas had to be replaced.

**What is Being Done**

To mitigate additional delays and avoid inconvenience to customers, the SVP and Chief Engineer approved a retroactive waiver and the contractor was directed to proceed with work. The final cost is pending the results from the upcoming negotiations.

**IEC Comment**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including the stated problem and the action taken by the Agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.

**Project No. M5020112**  
**Metro-North Railroad**  
**GCT Vital Processor System (GCT)**

**Total Project EAC: \$6.5M**  
**Original Substantial Completion: Aug 2011**  
**Current Substantial Completion: Dec 2011**  
**PHASE: Construction (90% complete)**

### Project Description

This MNR Force Account Project will replace the Vital Processor Systems, associated electronics and AC systems that are used in the Upper Level signal CIL's in GCT. A new communications network serving both the Upper and Lower level locations as well as an HVAC system on Upper Level Central Instrument Locators will also be installed.

### Schedule and Budget

Currently, four month delay in completion of the force account work. No Impact to the project budget.

### Problems

Include the following:

Due to priority given to operational needs, and difficulty getting track outage to perform the work, project completion is delayed from August 2011 to December 2011.

### What is Being Done

Continued efforts by the Operation forces will have the work complete by the end of the year. No further delays are anticipated.

### IEC Comment:

Budget & Schedule & Performance: The IEC substantially agrees with the material presented in this report, including the stated problems and action taken by the agency.



**Project No. M5050102**  
**Metro-North Railroad**  
**Tagging Relays Harlem & Hudson Line**

**Total Project EAC: \$12.7M**  
**Original Substantial Completion: Aug-11**  
**Current Substantial Completion: Mar-12**  
**PHASE: Construction (93% complete)**

### Project Description

The purpose of this project is to retrofit the substation's control system in order to provide the capability for remote lock-out/tag-out function. The following work will be performed in the Substation Retrofit - Harlem and Hudson Line project: Construction (Harlem and Hudson Lines): Installation of a remote operated field electronic tagging relay to all circuit breakers or other disconnects located on the Harlem and Hudson Lines. The estimated useful life for these components is approximately 10 years.

### Schedule and Budget

Currently, seven month delay in completion of work. No impact to the project budget.

### Problems

Include the following:

Deliveries of the six remaining remote terminal units (RTU's) are now expected to be completed by March 2012. The schedule extension is partially due to the change in personnel at Jacobs Engineering (MNR's Design Consultant) which resulted in a delay in approvals of engineering designs at several RTU's. In addition, there was also a delay due to several MNR approved configuration changes at several RTU's. There is no cost impact to the project as a result of this schedule extension.

### What is Being Done

A revised delivery schedule was approved for the six remaining RTU's that calls for the delivery and commissioning of these units by March, 2012.

### IEC Comment:

Budget & Schedule & Performance: The IEC substantially agrees with the material presented in this report, including stated problems and action taken by the agency.

**Project No. U5030203****Roof/Ventilation: LaGuardia Depot****Total Project EAC: \$7.0M****Original Completion: July 2011****Current Completion: June 2012****Phase: Construction (71% Complete)****Project Description**

This project will replace approximately 112,000 square feet of roof. The existing roof has exceeded its useful life. A new bulkhead and staircase will be installed to allow safe access to the roof. A new ventilation system will be installed in the main building to provide a safe and secure work place.

**Problems**

**Schedule Change:** A 4 month schedule variance is reported in the Third Quarter 2011 TLR, with completion slipping from July to November 2011. Subsequently, as noted in this one page Agency report the substantial completion date for this project is currently forecast as June 2012. This project has slipped due to multiple issues encountered throughout the construction phase of this project. Some of the major issues are:

- 1) The designer of record failed to get FAA approval to place six Heat Recovery Units (HRUs) on the roof. The HRUs create an 18 foot increase in height of the depot only 625 feet from a runway end at LaGuardia.
- 2) During initial asbestos abatement of the roof, it was discovered that the concrete roof planks had deflected beyond tolerances. The entire roof had to be removed down to structural steel.
- 3) The main building high roof overhangs low roofs. The overhang decreased as a result of the concrete plank replacement, and the original roof level window design became unbuildable.
- 4) The contractor assembled dunnage for all six HRUs with incorrect dimensions and without supports for two vibration isolators at each HRU.
- 5) The natural gas utility (National Grid) determined that the existing gas service did not have the capacity to supply the new HRUs, and that a new service was required. Additionally, National Grid required that existing street level windows be replaced by a concrete block wall where the window caulk contained asbestos not included in the scope of work.

**What is Being Done for Schedule**

- 1) MTA Bus contracted an FAA Class 1A survey, then sought and secured a favorable determination from the FAA allowing installation of the HRUs.
- 2) MTA Bus designed a corrugated metal roof deck to replace the concrete planks, and issued a change order for the replacement. All work completed.
- 3) MTA Bus designed a new assembly for windows, frames and fascia panels. Redesigned windows are on site pending installation.
- 4) The Contractor corrected dunnage dimensioning. MTA Bus provided corrective design for missing vibration isolators.
- 5) MTA Bus designed new service which National Grid approved (work in progress) and had asbestos abated (work completed).
- 6) Additionally, MTA Bus has compiled a list of design errors and omissions by the consultant of record, along with estimated costs for change orders. This information is being forwarded for Legal review for appropriate action. MTA Bus is also submitting an ACE evaluation of "Unsatisfactory" (pending) for this same consultant for their construction support services. This evaluation could prevent them from securing future work from any of the MTA Agencies.

**IEC Comment:**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including stated problems and action taken by the agency.

**All Agency Contractor Evaluation (ACE):** The IEC has reviewed the project performance for consistency in the Agency's evaluation of the overall contractor's performance rating for this reporting period.

**Project No. 5030216****Additional Fueling Capacity: Baisley Park, JFK, LaGuardia****Total Project EAC: \$8.7M****Original Substantial Completion: July 2012****Current Substantial Completion: Aug 2013****Phase: Construction (2% complete)****Project Description**

The existing underground fuel tanks at Baisley Park, JFK and LaGuardia Bus Depots have insufficient capacity to adequately fuel the fleet they serve. Currently, the bus fleets at Baisley Park and LaGuardia depots are fueled from three (3) four thousand-gallon diesel underground storage tanks (USTs) each; JFK has four (4) four thousand-gallon diesel USTs. Daily diesel fuel deliveries are required, and there is no spare capacity available in the event of fuel dispensing line or tank repairs. In addition, the existing limited capacity is inadequate to keep buses fueled for a reasonable time span in the event of supply disruption or market shortages.

Under this project, new tanks will be added to provide adequate capacity to support the current fleet at each depot. A four thousand-gallon capacity UST will be added to existing tanks at Baisley Park. Two (2) ten thousand-gallon capacity USTs will replace the existing tanks at JFK and LaGuardia depots. With the addition of the tanks, the depots will have adequate supply for at least three days to keep the fleet on the road without any potential disruption. Additionally, the existing fueling station at LaGuardia Depot will be relocated to align with the planned relocation of the depot bus wash (under separate contract).

**Problem:**

**Schedule:** The substantial completion date has slipped 13 months from July 2012 to at least August 2013. MTA Bus leases these properties and, as such, the completion date may slip further due to recent issues regarding the landlord/tenant agreement. This is because the New York State Department of Environmental Conservation (NYSDEC) has identified the landlord as the responsible party for contamination of soil, and under a consent order agreement, the landlord is required to delineate the nature and extent of contamination, and implement sufficient remedial action. A pending amendment to the lease will allow installation of USTs to be done by MTA Bus.

**What is Being Done**

**Schedule:** The job is temporarily on hold as MTA Bus Legal discusses lease amendment language with the landlord's counsel to ensure the project moves forward unimpeded. MTA Bus is also conducting independent evaluation of subsurface work to date to better assess potential impacts to project, and implement appropriate construction techniques to ensure minimal impact to landlord's ongoing subsurface investigation.

**IEC Comment:**

**Budget & Schedule & Performance:** The IEC substantially agrees with the material presented in this report, including stated problems and action taken by the agency

**Projects in CPOC's Risk-Based Monitoring Program**  
**(Not Included in Third Quarter 2011 Traffic Light Report)**

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The following programs/projects are currently reported on by the responsible agency in risk-based monitoring reports in accordance with the CPOC Work Plan schedule and are continually monitored by the Independent Engineering Consultant. They are not included in the Quarterly Traffic Light Report. The program/project list is subject to periodic review and adjustment by MTA.

**2005-09 Capital Program**

1. Second Avenue Subway
2. East Side Access
3. Flushing Line Extension
4. Fulton Street Transit Center
5. Signals & Communications
6. New Subway Car Procurement
7. New Bus Procurement

**2010-14 Capital Program**

1. Second Avenue Subway
2. East Side Access
3. East Side Access Readiness
4. Flushing Line Extension
5. Fulton Street Transit Center
6. Signals & Communications
  - Positive Train Control
  - PA/CIS, SONET
  - CBTC
7. New Subway Car Procurement
8. New Bus Procurement
9. CRR Rolling Stock
  - Procurement
  - RCM & Diesel Fleet Maintenance
10. Track Improvements
11. NYC Transit Infrastructure / Culver Line Viaduct-Phase 2
12. Bus Depots / Mother Clara Hale