



Metropolitan Transportation Authority

# Audit Committee Meeting

## January 2015

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### Committee Members

J. Sedore Jr., Chair

F. Ferrer

R. Bickford

C. Moerdler

A. Saul

**Audit Committee Meeting**  
347 Madison Ave. - 5th Floor Board Room  
New York, NY 10017  
Tuesday, 1/20/2015  
2:45 - 3:45 PM ET

**1. PUBLIC COMMENTS PERIOD**

**2. APPROVAL OF MINUTES - NOVEMBER 19, 2014**

*Minutes of November 19, 2014 Meeting - Page 3*

**3. AUDIT COMMITTEE WORK PLAN**

*2015 WORKPLAN - Condensed - Page 6*

*2015 WORKPLAN - Detailed - Page 8*

**4. INDEPENDENT ACCOUNTANTS' REVIEW REPORT – 3RD QUARTER 2014 (Materials previously distributed)**

**5. 2013 PENSION AUDITS (Materials previously distributed for MTA Deferred Compensation Program, MTA Defined Benefit Pension Plan, MTA Retiree Welfare Benefit Plan, LIRR Company Plan for Additional Pensions, MaBSTOA Pension Plan and MNR Cash Balance Plan)**

**6. INFORMATION TECHNOLOGY REPORT**

*2015 Technology Report - MTA Audit Committee - Page 12*

**7. 2014 YEAR-END STATUS AND 2015 PROPOSED AUDIT PLAN**

*2014 Year-End 2015 Audit Plan - Audit Committee Presentation - Page 25*

**MINUTES OF MEETING  
AUDIT COMMITTEE OF THE BOARD  
WEDNESDAY, NOVEMBER 19, 2014 – 8:30 A.M.  
5TH FLOOR BOARD ROOM  
347 MADISON AVENUE**

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The following were present:

**Honorable:**

James L. Sedore  
Fernando Ferrer

Robert Bickford  
Andrew Albert

Neal Zuckerman

M. Fucilli - MTA  
R. Foran - MTA  
S. Gellineau - MTA  
T. Habib - MTA

L. Kearse - MTA  
P. Kane - MTA  
N. Gilbertson – MNR

M. Fritz - Deloitte  
G. Friedrich - Deloitte  
M. Malloy - Deloitte

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**1. PUBLIC COMMENTS PERIOD**

There were no public speakers.

**2. APPROVAL OF MINUTES**

The minutes of the September 24, 2014 Audit Committee meeting were approved.

**3. AUDIT COMMITTEE WORKPLAN**

The Chair briefly mentioned the agenda for the next meeting in January and noted there were no changes to the work plan.

**4. AUDIT APPROACH PLANS**

Michael Fritz (Deloitte) briefed the Committee on Deloitte’s audit approach plan, which he noted is presented in the “MTA 2014 Audit Service Plan” document that was provided earlier to the Committee electronically. He indicated that the same audit team as last year will perform the audit engagement. He said that their audit will: (1) address significant risks under the professional standards such as fraud and management over-rides and (2) focus on “what could go wrong” in recording of toll revenues; appropriation and safeguarding of assets; accounting of cash; valuation of investments; capitalization of assets; and on any reserves or situation where management judgment is involved. He said they will also look at pension liabilities and will be working closely with financial management in determining the net obligations of any cost sharing plans and MTA pension plans that will be required to be recorded in the accounts in 2015 with the adoption of GASB 67 and 68. Glen Friedrich (Deloitte) noted that a significant amount of coordination and effort would be required between the auditors, the actuary, financial management and the State and City pension agencies to comply with GASB 67 and 68. Finally, Fritz indicated that the audit approach, the standard audit communication and the audit work timeline for this year’s audit would be essentially the same as in the past. In response to a Committee inquiry, he said that an audit update will be provided in the January meeting and any matters of audit

concern will be immediately brought to attention of the Chair, the Auditor General and financial management so there are no surprises at the end.

## **5. MTA ENTERPRISE RISK MANAGEMENT & INTERNAL CONTROL GUIDELINES**

Lamond Kears (MTA) provided the Committee with an Overview of the Risk Management Process at the MTA. He stated that the core of the ERM and Internal Control Program is to provide reasonable assurance that the MTA will achieve its goals. He provided the Committee with a briefing on: (1) the definition and purpose of Internal Controls; (2) how the internal controls work and (3) risk ranking and the reasons for doing it. He also provided the Committee with the ERM Committee Report and discussed the contents of the report which included, among others: (1) a summary report noting All-Agency Full Compliance with NYS Governmental Accountability, Audit and Internal Control Act Requirements; (2) ERM Committee Structure; (3) ERM Staffing by Agency; (4) Review of Internal Controls Performance (5) Status of Corrective Action Plans and (6) Risk Changes and Impact. In response to Committee inquiries, there were discussions on whether the ERM process has a predictive quality to it or if the ERM data base or “lessons learned” at an agency can be leveraged or communicated to benefit other agencies. Lamond indicated that most of the data that previously resided separately are now centralized in the Governance Risk and Compliance (GRC) system. He said that work continues toward making the system capable of providing “good risk intelligence” so that patterns of risks or control issues can be shared across all agencies. In response to a Committee inquiry as to when such capability would be realized, Lamond indicated that he is working closely with NYC Transit to have their relevant internal control and ERM information entered into the GRC system. The Committee also inquired about the data related to the significant business processes reviewed, specifically the 5% ratio of significant deficiencies to total controls at MNR. Nate Gilbertson (MNR) confirmed that the 5% figure pertained to significant processes related mostly from FRA and NSTB reviews of the 2013 incidents. The Committee commented that significant number of retirements had an impact on the internal controls at the agency. There were further discussions about whether test runs can be performed on the GRC data to determine agency-wide reaction or whether the system can identify any potential risk deterioration so that it can be responded to promptly. Lastly, in response to the Chair’s inquiry, Lamond indicated that the NYC Transit internal control and risk data that currently are maintained manually in worksheets would be incorporated into the system in 2015.

## **6. REVIEW OF AUDIT COMMITTEE CHARTER**

The Chair presented the Charter to the Committee and, having noted no recommended changes to it, moved to approve the Charter for presentation to the Board.

The motion was seconded to present the Charter to the full Board.

## **7. ANNUAL AUDIT COMMITTEE REPORT**

The Chair directed the Committee’s attention to the Summary of Audit Committee Activity report, which presents all activities conducted at the Audit Committee for the 12-month ended July 2014. The Chair requested for comments and a motion to accept the report.

The Committee voted to accept the report.

8. **OPEN AUDIT RECOMMENDATIONS**

Lamond Kears informed the Committee that the review of the open audit recommendations found that none exceeded the six month period beyond their implementation date. Therefore, there were no open recommendations to report to the Committee. The Chair inquired if reports on safety investigations such as the NTSB report on Metro-North are tracked. Lamond confirmed that they are being tracked and any recommendation that is still open past the six month implementation date will be reported to the Committee.

9. **SECURITY OF SENSITIVE DATA**

S. Gellineau (MTA Chief Information Officer) first introduced T. Habib, the MTA Chief Information Security Officer, and then proceeded to provide the Committee with a brief background on the causes of data breaches, citing that 35% were due to human error, 29% to system glitches and 36% to malicious attacks. He said that although there is no corporate definition of sensitive data, these items are deemed sensitive data at the MTA: Social Security Numbers, Credit Card Numbers, Sensitive Infrastructure Schematics, Sensitive Operational Plans, License Numbers and other sensitive information such as legal correspondence and document management systems.

At this point of the meeting, the Chair requested the Committee to go into Executive Session for the security portion of the presentation.

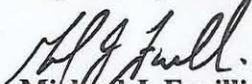
10. **EXECUTIVE SESSION**

The strategy and the steps being taken to protect sensitive data at the MTA were discussed at this session.

11. **MOTION TO ADJOURN**

The Committee returned to regular session, at which time a motion was made and seconded to adjourn the meeting.

Respectfully submitted,

  
Michael J. Fucilli  
Auditor General

## 2015 AUDIT COMMITTEE WORK PLAN

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### I. RECURRING AGENDA ITEMS

#### Responsibility

Approval of Minutes	Committee Chair & Members
Audit Work Plan	Committee Chair & Members
Pre-Approval of Audit and Non-Auditing Services	As Appropriate
Follow-Up Items	As Appropriate
Status of Audit Activities	Auditor General/MTA IG/ Chief Compliance Officer/ External Auditor/As Appropriate
Executive Sessions	As Appropriate

### II. SPECIFIC AGENDA ITEMS

#### January 2015

Quarterly Financial Statements – 3 <sup>rd</sup> Quarter 2014	External Auditor/CFOs
Pension Audits	External Auditor
2014 Audit Plan Status Report	Auditor General
2015 Audit Plan	Auditor General
Information Technology Report	Chief Information Officer

#### April 2015

Financial Statements w/Audit Representation Letters	External Auditor/CFOs/Controllers
Contingent Liabilities/Third Party Lawsuits (Executive Session)	General Counsels/External Auditor
Financial Interest Reports	Chief Compliance Officer
Ethics and Compliance Program	Chief Compliance Officer
Enterprise Risk Management Update	Chief Compliance Officer
DDCR Performance Measures (new)	Chief Diversity Officer

June 2015

Quarterly Financial Statements – 1 <sup>st</sup> Quarter 2015	External Auditor/CFOs
Single Audit Report	External Auditor/CFOs
MTAAS Audit Plan Status Report	Auditor General
Investment Compliance Report	External Auditor
Management Letter Reports	External Auditor/CFOs/Controllers

September 2015

Quarterly Financial Statements – 2 <sup>nd</sup> Quarter 2015	External Auditor/CFOs
Compliance with the Requirements of the Internal Control Act	Agency ICOs/Chief Compliance Officer
Appointment of External Auditors	CFOs/Controllers
Review of MTA/IG's Office	External Auditor/IG
Enterprise Risk Management Update	Chief Compliance Officer

November 2015

MTA Enterprise Risk Management  
and Internal Control Guidelines  
Annual Audit Committee Report  
Review of Audit Committee Charter  
Audit Approach Plans/Coordination  
with External Auditors  
Open Audit Recommendations  
Security of Sensitive Data  
DDCR Performance Measures (new)

Responsibility

Chief Compliance Officer  
Audit Committee  
Committee Chair  
  
External Auditor  
Agency ICOs/Chief Compliance Officer  
Chief Information Officer  
Chief Diversity Officer

# 2015 AUDIT COMMITTEE WORK PLAN

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## Detailed Summary

### **I. RECURRING AGENDA ITEMS**

#### Approval of Minutes

Approval of the official proceedings of the previous month's Committee meeting.

#### Audit Work Plan

A monthly update of any edits and/or changes in the work plan.

#### Pre-Approval of Audit and Non-Auditing Services

As appropriate, all auditing services and non-audit services to be performed by external auditors will be presented to and pre-approved by the Committee.

#### Follow-Up Items

Communications to the Committee of the current status of selected open issues, concerns or matters previously brought to the Committee's attention or requested by the Committee.

#### Status of Audit Activities

As appropriate, representatives of MTA's public accounting firm or agency management will discuss with the Committee significant audit findings/issues, the status of on-going audits, and the actions taken by agency management to implement audit recommendations.

#### Executive Sessions

Executive Sessions will be scheduled to provide direct access to the Committee, as appropriate.

### **II. SPECIFIC AGENDA ITEMS**

## Detailed Summary

### **JANUARY 2015**

#### Quarterly Financial Statements – 3<sup>rd</sup> Quarter 2014

Representatives of the MTA public accounting firm, in conjunction with appropriate agency management, will discuss the interim financial statement that was prepared for the third quarter of 2014.

#### Pension Audits

Representatives of the MTA public accounting firms will provide the results of their reviews of the pension plans that are managed and controlled by MTA HQ, Long Island Rail Road, Metro-North and NYC Transit.

#### 2014 Audit Plan Status Report

A briefing by Audit Services that will include a status of the work completed, a summary of the more significant audit findings, and a discussion of the other major activities performed by the department.

### 2015 Audit Plan

A discussion by Audit Services of the areas scheduled to be reviewed in 2015 as well as the guidelines and policies that were used to assess audit risk and their application in the development of the audit work plan.

### Information Technology Report

The MTA Chief Information Officer will brief the Committee on the activities of the MTA IT for the past year, including its accomplishments, strategies and plans for the current year.

## **APRIL 2015**

### Financial Statements and Audit Representation Letters

The agency CFOs/Controllers will be available to the Committee to answer any questions regarding the submission of their audit representation letters to the external audit firm. The MTA public accounting firm will review the results and conclusions of their examination of the 2014 Financial Statements.

### Contingent Liabilities and Status of Third Party Lawsuits

The General Counsels from each agency, along with representatives from D&T, will review in Executive Session the status of major litigation that may have a material effect on the financial position of their agency, or for which a contingency has been or will be established and/or disclosed in a footnote to the financial statements. In addition, the Committee will be briefed on the status of third party lawsuits for which there has been minimal or sporadic case activity.

### Financial Interest Reports

The MTA Chief Compliance Officer will brief the Committee as to the agencies' compliance with the State Law regarding the filing of Financial Interest Reports (FIRs), including any known conflicts of interest.

### Ethics and Compliance Program

The MTA Chief Compliance Officer will brief the Committee on selected aspects of the MTA Ethics Program.

### Enterprise Risk Management Update

The MTA Chief Compliance Officer will brief the Committee on the status of agency compliance with the ERM guidelines and any new or emerging risk.

### DDCR Performance Measures (New)

The MTA Chief Diversity Officer will brief the Committee on the status of the performance measures on compliance monitoring by the Department of Diversity and Civil Rights.

## **JUNE 2015**

### Quarterly Financial Statements – 1<sup>st</sup> Quarter 2015

Representatives of MTA's public accounting firm, in conjunction with appropriate agency management, will discuss the interim financial statement that was prepared for the first quarter of 2015.

### Single Audit Report

Representatives of MTA's public accounting firm will provide the results of their Federally- and State-mandated single audit reviews at the MTA and NYC Transit.

### MTAAS Audit Plan Status Report

A briefing by Audit Services that will include a status of the work completed as compared to the audits planned for the year, a summary of the more significant audit findings, results of audit follow-up, and a discussion of the other major activities performed by the department.

### Investment Compliance Report

Representatives of the MTA's public accounting firm will provide a review of MTA's compliance with the guidelines governing investment practices.

### Management Letter Reports

Reports will be made by the MTA's public accounting firm on the recommendations made in the auditors' Management Letter for improving the accounting and internal control systems of the MTA and its agencies. The report will also include management's response to each Management Letter comment. The response will describe the plan of action and timeframe to address each comment. In addition, the report will contain a follow-up of prior years' open recommendations conducted by the external audit firm.

## **SEPTEMBER 2015**

### Quarterly Financial Statements - 2<sup>nd</sup> Quarter 2015

Representatives of MTA's public accounting firm, in conjunction with appropriate agency management, will discuss the interim financial statement that was prepared for the second quarter of 2015.

### Compliance with the Requirements of the Internal Control Act

The Committee will be briefed by the MTA Chief Compliance Officer and Agency Internal Control Officers on the results of the All-Agency Internal Control Reports issued to the NYS Division of the Budget as required by the Government Accountability, Audit and Internal Control Act.

### Appointment of External Auditors

The Audit Committee will review the appointment of the independent auditor for MTA HQ and all the agencies. As part of this process, the Auditor General has reviewed and provided to the Committee, and will retain on file, the latest report of the firm's most recent internal quality control review.

### Review of the MTA Inspector General's Office

Representatives of MTA's public accounting firm will provide the results of their review of the MTA/IG's operation to ensure compliance with applicable office regulations, rules, policies and procedures.

### Enterprise Risk Management Update

The MTA Chief Compliance Officer will brief the Committee on the status of agency compliance with the ERM guidelines and any new or emerging risk.

## **NOVEMBER 2015**

### Review of MTA Enterprise Risk Management and Internal Control Guidelines

These MTA-wide guidelines were adopted by the Board in November 2011, pursuant to Public Authority Law Section 2931. The Audit Committee is required to review these Guidelines annually. The MTA Chief Compliance Officer will brief the Committee with respect to agency compliance with these guidelines and answer any questions and offer additional comments, as appropriate.

### Annual Audit Committee Report

As a non-agenda information item, the Audit Committee will be provided with a draft report which outlines the Audit Committee's activities for the 12 months ended July 2015. This report is prepared in compliance with the Audit Committee's Charter. After Committee review and approval, the Committee Chair will present the report to the full MTA Board.

### Review of Audit Committee Charter

The Committee Chair will report that the Committee has reviewed and assessed the adequacy of the Audit Committee Charter and, based on that review, will recommend any changes for 2015. The review will also show if the Committee's performance in 2015 adequately complied with the roles and responsibilities outlined in its Charter (i.e. monitoring and overseeing the conduct of MTA's financial reporting process; application of accounting principles; engagement of outside auditors; MTA's internal controls; and other matters relative to legal, regulatory and ethical compliance at the MTA).

### Audit Approach Plans/Coordination with External Auditors

Representatives of MTA's public accounting firm will review their audit approach for the 2015 year-end agency financial audits. This review will describe the process used to assess inherent and internal control risks, the extent of the auditor's coverage, the timing and nature of the procedures to be performed, and the types of statements to be issued. In addition, the impact of new or proposed changes in accounting principles, regulations, or financial reporting practices will be discussed.

### Open Audit Recommendations

The MTA Chief Compliance Officer and Agency Internal Control Officers will report to the Committee on the status of audit recommendations previously accepted by their respective agency.

### Security of Sensitive Data

The MTA Chief Information Officer will make a presentation to the Committee on the security of sensitive data at the MTA, including a discussion on mobile device security.

### DDCR Performance Measures (New)

The MTA Chief Diversity Officer will brief the Committee on the status of the performance measures on compliance monitoring by the Department of Diversity and Civil Rights.

# Annual Technology Report MTA IT Department

MTA Audit Committee  
January 20, 2015



## Purpose/Overview

This report is prepared annually to update Audit Committee members on major enterprise-level technology strategies and initiatives underway.

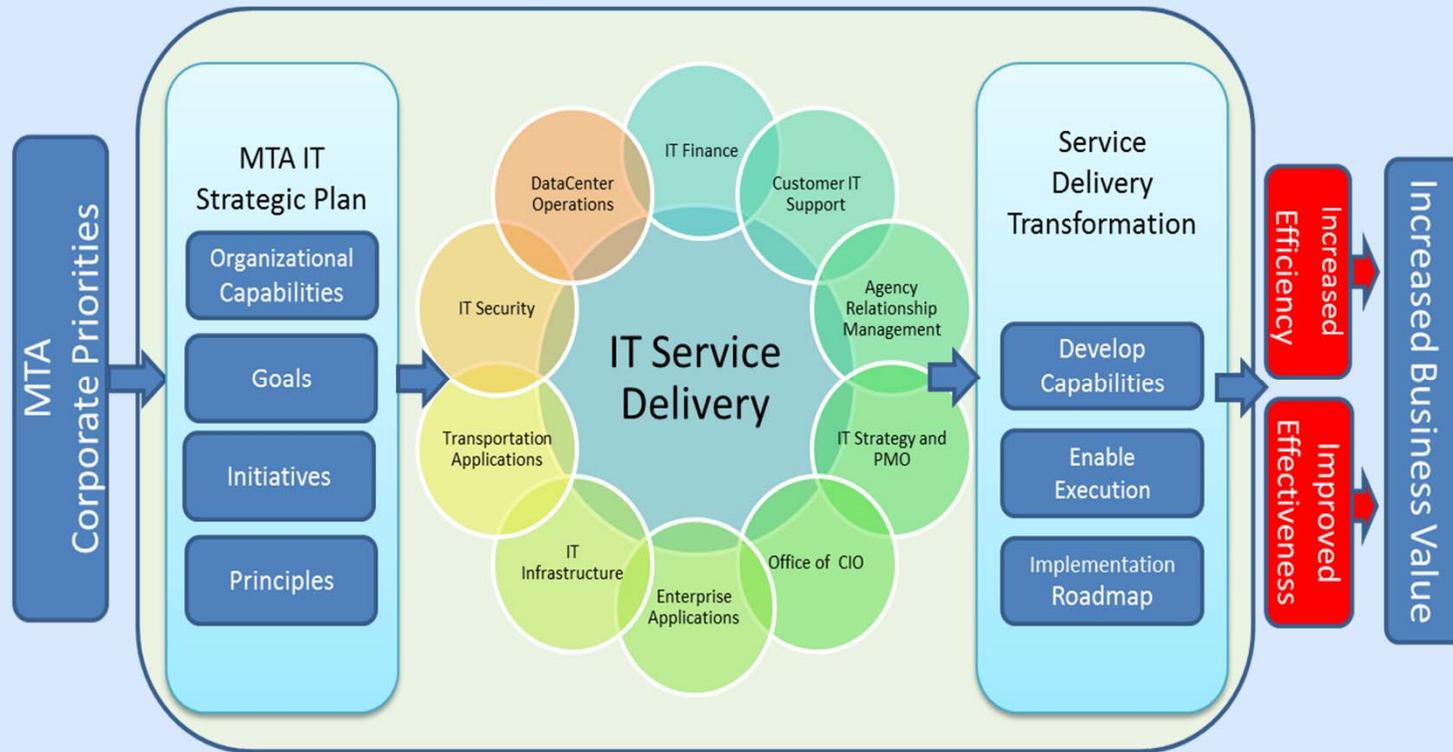
- The consolidation of our IT service delivery model to a unified organizational structure went live January 1, 2015.
- Transformation is now an integral and ongoing component of a business-driven Strategic Technology Plan, which will ensure linkage with Corporate goals, optimize resource allocation and service delivery and provide for improved security and control.



# IT Transformation

Announced in August, 2013 the transformation is a significant undertaking requiring large scale restructuring of all aspects of our service delivery model, including people, process, organization, technology and finances.

It is intended to enhance the delivery and consistency of IT services across the organization, better leveraging IT resources and talent and positioning the department to support the MTA's mission and corporate goals.



# The IT Strategic Plan is informed by business priorities

## MTA Mission

“The Metropolitan Transportation Authority (“MTA”) preserves and enhances the quality of life and economic health of the region we serve through cost-efficient provision of safe, on-time, reliable and clean transportation services”

## MTA Corporate Priorities

A Safe & Secure network for our customers and employees

Regular capital investments to ensure reliability & resiliency of the MTA network

Customer service

Aggressive Management of MTA finances

## MTA IT Mission

The Information Technology Department’s mission is to deliver innovative and responsive solutions that enable safe, effective, and efficient transportation operations that strategically align with the overarching corporate MTA goals. Information Technology will partner with all MTA business units to understand the overall information needs of the transit agencies and the communities they serve to optimize the adoption and use of information technology.

## MTA IT Vision

The MTA Information Technology Department aims to deliver cost effective, reliable and best-in-class service to its customers while achieving a consistent high-level user satisfaction.

## MTA IT Goals

Secure access to MTA systems from any location, any time, on a variety of devices

An efficient, secure, reliable and sustainable IT environment

Provide governance and resources that optimize technology

Business-driven view of Information Technology

Transform MTA IT into a learning organization

# Current Accomplishments

2014 Goals	Complete
Establish high-level organizational design, aligning all core IT process functions with new Divisions in accordance with general industry standards/best practices	✓
Established Transformation Roadmap to prioritize and manage critical activities.	✓
Communicate purpose, goals, approach and timeframes to work force, including Town Hall meetings	✓
Work successfully with labor unions to establish necessary collective bargaining agreements.	✓
Established MTA-wide Governance procedures to lay the foundation for decision making, setting priorities, and project controls for the MTA IT organization.	✓
Manage Human Resource activities to evaluate select and fill all leadership positions.	✓
Finalized assignments, offer letters, and mapping of all employees to their responsibility centers within MTA IT.	✓



# Prior Accomplishments 2012-2014

*Even though the enterprise wide MTA IT department has been recently formed, collaborative IT has been formally underway at the MTA since 2012. Prior achievements and enterprise level IT agreements resulted in the formation of several initiatives that are well underway or have been completed.*

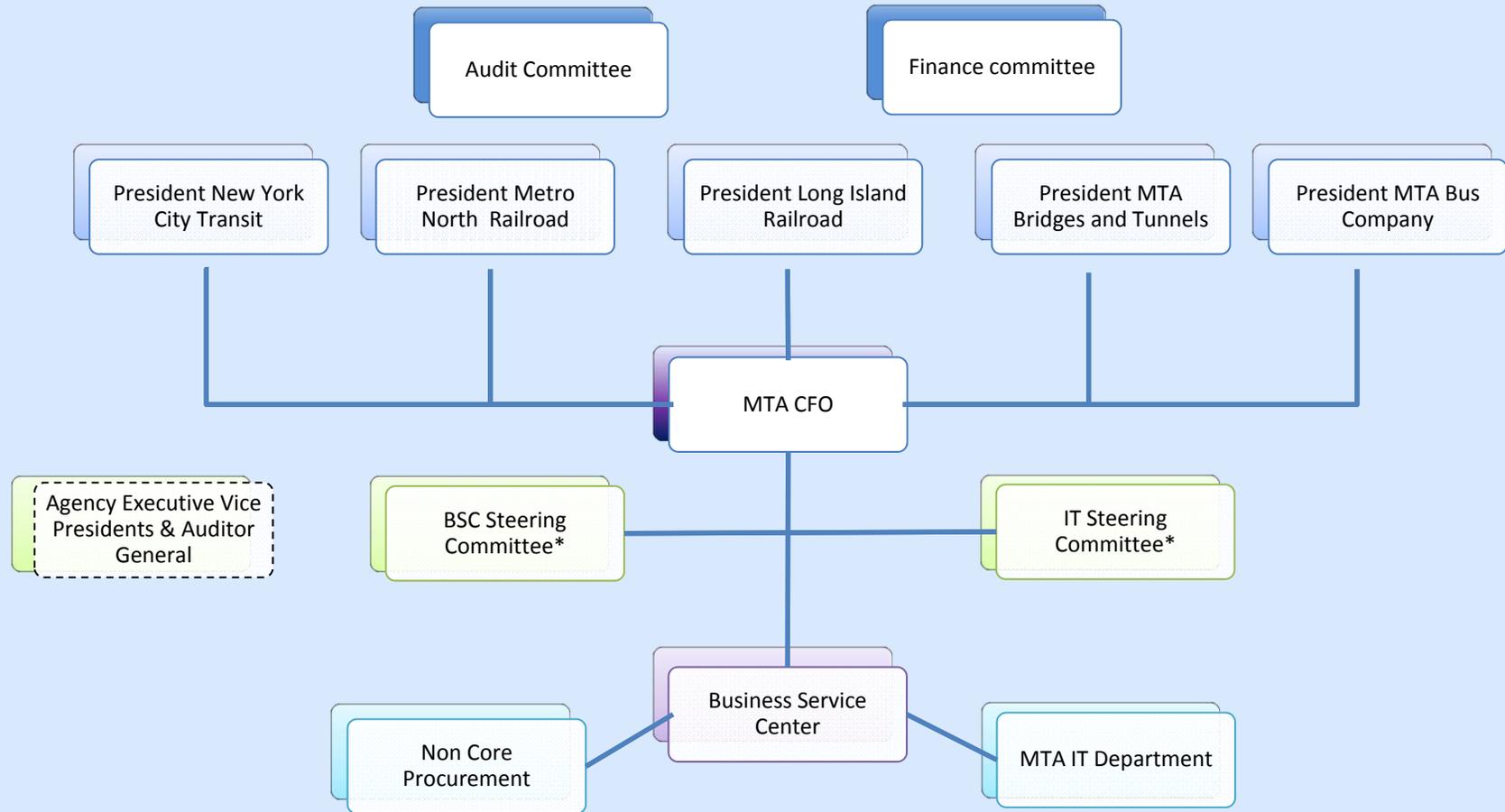
Description	In Progress	Complete	Benefit
E-Mail Rationalization		✓	Multiple e-mail platforms at the MTA are inefficient- rationalizing to a single platform will provide greater value while reducing cost.
Security		✓	24/7/365 security monitoring can be performed by one operations center, instead of several across the MTA with minimum risk.
Data Center & Server Consolidation	✓		The MTA can gradually and systematically shut down 20 data centers, keeping only the three most efficient and resilient ones.
Application Rationalization	✓		Over 700 software applications are currently maintained by MTA staff. By consolidating redundant applications across agencies we can reduce maintenance efforts and devote more resources to application development and the maintenance of a common and current Enterprise Resource Planning (ERP) system.
Voice Communications	✓		Over seven different groups at the MTA manage voice communications. By combining these groups we can standardize on a "one MTA" voice communication system.
WAN		✓	Costly multiple wide area networks can be consolidated into one providing greater capability while reducing cost.
IT Business Management		✓	Each MTA Agency had a separate IT management structure. Better leveraging IT management can result in greater specialization and less duplication in work and staff.
Help Desk	✓		Multiple costly help desks can be consolidated into one, delivering real savings to the MTA.

# Aligning IT Goals with Corporate Priorities

*An IT strategy is really all about how we will use people and technology to develop the innovative solutions necessary to support the mission and vision of the organization, and IT goals must be in alignment with Corporate Priorities.*

IT GOALS	Corporate Priorities			
	A Safe & Secure Network For Our Customers And Employees	Regular Capital Investments To Ensure The Reliability And Resiliency Of The MTA Network	Customer Service	Aggressive Management Of Our Finances
<b>Goal 1: Secure Access to MTA Systems from Any Location, Any Time, on a variety of devices</b>	✓			
<b>Goal 2: An Efficient, Secure, Reliable and Sustainable IT Environment</b>	✓	✓	✓	✓
<b>Goal 3: Governance and Resources That Optimize Technology</b>		✓		✓
<b>Goal 4: Customer-Driven View of IT</b>	✓		✓	
<b>Goal 5: Transform MTA IT into a learning organization</b>			✓	✓

## Governance and oversight interactions for IT and the BSC occur at all management levels



\*The status of major projects is reported at every Steering Committee Meeting; issues are explained and discussed with all agencies



# Key IT Challenges

*A number of key challenges have been identified based on collaborative interactions with the IT Steering Committee and during other Agency Executive outreach sessions conducted by the Chief Information Officer. MTA IT will work to overcome these challenges through our current strategic initiatives.*

## MTA IT Challenges

To implement technology, processes, and data with improved coordination, minimizing stovepipes and duplicated efforts.

To set spending priorities and maintaining project control through the governance processes.

To identify and adopt common and repeatable processes based on business and IT needs.

To increase opportunities to share data and applications.

To communicate effectively and provide a clear understanding of the value that MTA IT delivers to customers.

To mature key functions including enterprise and solutions architecture planning, data, governance, customer relationship management, and vendor management.



# Ensuring Success – Performance Measurement

*Performance measurement will play a critical role in making this IT Strategic Plan relevant and responsive to changing conditions. Measuring performance at various levels and through different lenses will allow us to monitor incremental progress toward achieving our goals, and can help us identify where changes should be made .*

Initiative Name	Performance Measures
<b>Secure Access</b>	<ul style="list-style-type: none"> <li>• Increase in number of mobile users who securely access MTA systems</li> <li>• Increase in number of tools and methodologies provided that support mobile users in securely accessing MTA systems via any approved device</li> <li>• Increase in number of ICS/SCADA (Industrial Control System, Supervisory Control And Data Acquisition) systems being monitored for compliance with relevant security standards.</li> </ul>
<b>IT Service Support Excellence</b>	<ul style="list-style-type: none"> <li>• Increase in availability, quality, and use of self-service offerings</li> <li>• Decrease in help desk tickets for areas solvable by self-service</li> <li>• Decrease in average number of tickets per user</li> </ul>
<b>Application Portfolio Modernization -</b>	<ul style="list-style-type: none"> <li>• Increase in number of applications as well as platforms in the Application Inventory that are capable of using authorized mobile devices and conversely decrease the number of legacy applications and platforms in the Application Inventory that cannot be reengineered to utilize mobile devices</li> <li>• Increase in legacy applications which can be ported to Cloud Based Architectures</li> <li>• Increase in percentage of new applications using Cloud Based Architectures</li> </ul>
<b>Standardized Infrastructure</b>	<ul style="list-style-type: none"> <li>• Decrease in environmental footprint in accordance with MTA IT plans for electronic stewardship and data center consolidation</li> <li>• Increase in availability of demand-based infrastructure</li> </ul>



# Ensuring Success – Performance Measurement (cont'd)

Initiative Name	Performance Measures
<b>Consolidate and Broaden IT Services</b>	<ul style="list-style-type: none"> <li>• Increase in number of hosted commodity, shared, and/or cloud-brokered IT services made available to MTA Business Units</li> <li>• Increase in availability of MTA enterprise data standards</li> <li>• Increase in tools and methods to facilitate enterprise-wide information sharing</li> <li>• Increase in number of virtual server instances using Managed Cloud service providers for support</li> </ul>
<b>Optimized IT Portfolio</b>	<ul style="list-style-type: none"> <li>• Increase percentage of new and/or enhanced projects which use Gartner’s Run, Grow, Transform model</li> <li>• Increase in benefits realized as a result of standards, policy, and governance processes</li> <li>• Increase in number of MTA IT projects actively tracked by the PMO to support a standardized project management approach</li> </ul>
<b>IT Workforce Transformation</b>	<ul style="list-style-type: none"> <li>• Increase in employee engagement survey satisfaction scores</li> <li>• Increase in enhanced skills capacity and capabilities aligned to meet desired service delivery</li> <li>• Increase in IT workforce tools, practices, and processes shared across the MTA IT Divisions</li> </ul>
<b>Unified Vendor Management</b>	<ul style="list-style-type: none"> <li>• Decrease in number of contracts</li> <li>• Savings from economy of scale and Enterprise License Agreements (ELA’s)</li> </ul>
<b>Effective Business Line Partnership</b>	<ul style="list-style-type: none"> <li>• Increase in positive engagements (communications, reviews, customer satisfaction surveys, meetings, consultations) among lines of business, and other strategic partners</li> <li>• Increase in level of user productivity education, awareness, and end-user support</li> </ul>

# Ensuring Success – Performance Measurement (cont'd)

Initiative Name	Performance Measures
<b>Business Capability Consulting</b>	<ul style="list-style-type: none"> <li>• Increase in number of BPM (Business Process Management ) resources, new technologies, and innovative solutions deployed to enhance MTA business capabilities such as cloud-hosted business applications</li> <li>• Increase in number of consultation-driven project proposals successfully implemented</li> </ul>
<b>IT Service Delivery Excellence</b>	<ul style="list-style-type: none"> <li>• Increase in number of IT services that have defined cost drivers and return on investment.</li> <li>• Increase in number of IT services available in an IT service catalog</li> <li>• Increase in number of IT services meeting service-level agreements (SLAs)</li> </ul>
<b>Leverage Emerging Technologies</b>	<ul style="list-style-type: none"> <li>• Increase in number of technology evaluations to determine their usefulness in solving MTA business problems</li> <li>• Increase in number of proof of concept projects initiated to demonstrate viability of the technology in MTA environments</li> <li>• Increase in number of pilot projects to demonstrate use cases in a production environment</li> </ul>
<b>Workforce skills modernization -</b>	<ul style="list-style-type: none"> <li>• Increase in the average number of external training classes attended per IT employee.</li> <li>• Increase in aggregate number and adequate distribution of skills which support modern frameworks and technologies</li> </ul>
<b>Collaborative IT organization</b>	<ul style="list-style-type: none"> <li>• Increase in the number of teams formed using agile development techniques per quarter</li> <li>• Number of “new ideas” which can yield potential business value</li> <li>• Percent increase in use of collaborative tools tracked periodically</li> </ul>



# Questions ?



# MTA AUDIT SERVICES

## 2014 Year End Status and 2015 Proposed Audit Plan



January 20, 2014

# 2014 Audit Plan Summary

## Financial/Operational/Technology

- Projects Completed = 186
- Recommendations = 759
- Savings/Cost Efficiencies = \$ 39.4 M

## Contracts

- Projects Completed = 130
- Pre-Award OH Reviews Done = 152
- \$ Audited = \$ 747 M
- Questioned Costs = \$ 39.5 M

# 2014 Audit Plan

## Superstorm Sandy Audits

- **Total Grant Expenditures = \$573.5 M**
- **Total \$ Audited = \$172 M**
- **Projects Completed = 28**
- **Recommendations = 84**
- **Total Cost Adjustments = \$ 38.4 M**

# MTA AUDIT SERVICES

## 2015 AUDIT PLAN



# *Audit Plan Formulation*

## **Perform Company Analysis**

Analyze strategies, financial indicators, and operational controls to identify the audit universe.

## **Develop Value Driver Analysis**

Understand enterprise, business unit and functional strategies based on business risk factors and discussions with key management personnel.

## **Evaluate Enterprise Risk**

Evaluate the enterprise risk using five main key indicators.

## **Prioritize Audits**

Identify auditable activities / units, based on the results of the risk assessment.

## **Refine Audit Strategy**

Using the IIA's risk assessment methodology formulate audit plan and obtain Audit Committee approval.

September

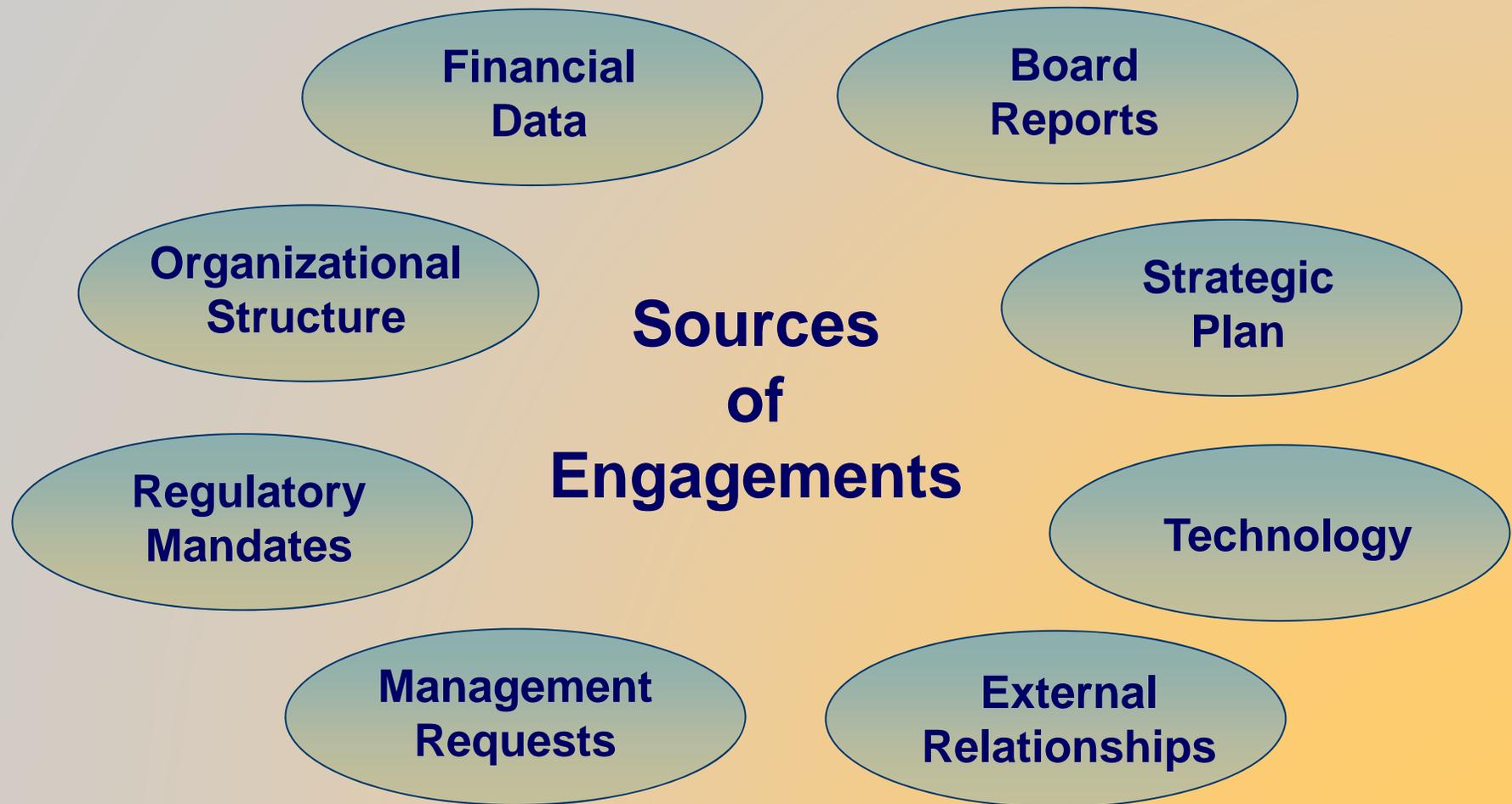
October

November

December

January

# The Audit Universe



# Annual Technology Report MTA IT Department

MTA Audit Committee  
January 20, 2015



## Purpose/Overview

This report is prepared annually to update Audit Committee members on major enterprise-level technology strategies and initiatives underway.

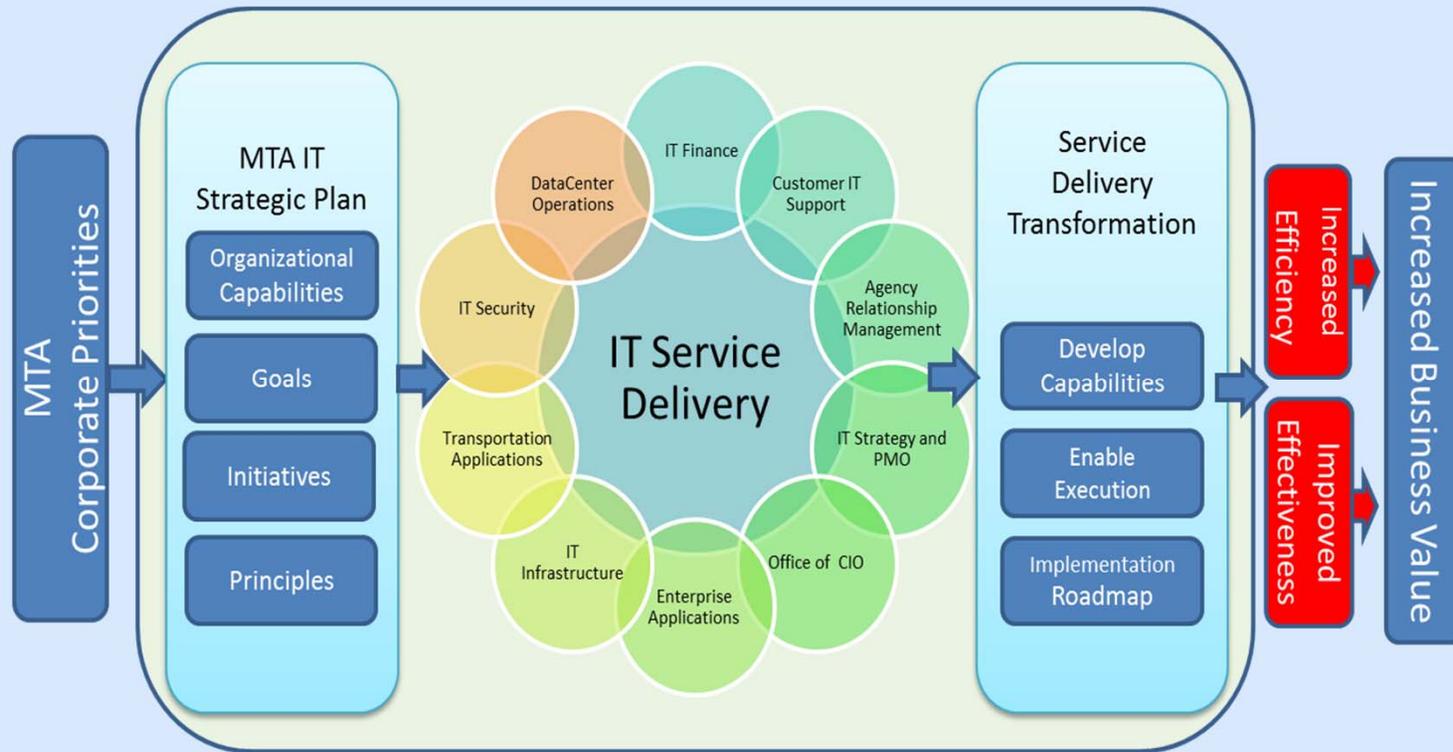
- The consolidation of our IT service delivery model to a unified organizational structure went live January 1, 2015.
- Transformation is now an integral and ongoing component of a business-driven Strategic Technology Plan, which will ensure linkage with Corporate goals, optimize resource allocation and service delivery and provide for improved security and control.



# IT Transformation

Announced in August, 2013 the transformation is a significant undertaking requiring large scale restructuring of all aspects of our service delivery model, including people, process, organization, technology and finances.

It is intended to enhance the delivery and consistency of IT services across the organization, better leveraging IT resources and talent and positioning the department to support the MTA's mission and corporate goals.



# The IT Strategic Plan is informed by business priorities

## MTA Mission

“The Metropolitan Transportation Authority (“MTA”) preserves and enhances the quality of life and economic health of the region we serve through cost-efficient provision of safe, on-time, reliable and clean transportation services”

## MTA Corporate Priorities

A Safe & Secure network for our customers and employees

Regular capital investments to ensure reliability & resiliency of the MTA network

Customer service

Aggressive Management of MTA finances

## MTA IT Mission

The Information Technology Department’s mission is to deliver innovative and responsive solutions that enable safe, effective, and efficient transportation operations that strategically align with the overarching corporate MTA goals. Information Technology will partner with all MTA business units to understand the overall information needs of the transit agencies and the communities they serve to optimize the adoption and use of information technology.

## MTA IT Vision

The MTA Information Technology Department aims to deliver cost effective, reliable and best-in-class service to its customers while achieving a consistent high-level user satisfaction.

## MTA IT Goals

Secure access to MTA systems from any location, any time, on a variety of devices

An efficient, secure, reliable and sustainable IT environment

Provide governance and resources that optimize technology

Business-driven view of Information Technology

Transform MTA IT into a learning organization

# Current Accomplishments

2014 Goals	Complete
Establish high-level organizational design, aligning all core IT process functions with new Divisions in accordance with general industry standards/best practices	✓
Established Transformation Roadmap to prioritize and manage critical activities.	✓
Communicate purpose, goals, approach and timeframes to work force, including Town Hall meetings	✓
Work successfully with labor unions to establish necessary collective bargaining agreements.	✓
Established MTA-wide Governance procedures to lay the foundation for decision making, setting priorities, and project controls for the MTA IT organization.	✓
Manage Human Resource activities to evaluate select and fill all leadership positions.	✓
Finalized assignments, offer letters, and mapping of all employees to their responsibility centers within MTA IT.	✓



# Prior Accomplishments 2012-2014

*Even though the enterprise wide MTA IT department has been recently formed, collaborative IT has been formally underway at the MTA since 2012. Prior achievements and enterprise level IT agreements resulted in the formation of several initiatives that are well underway or have been completed.*

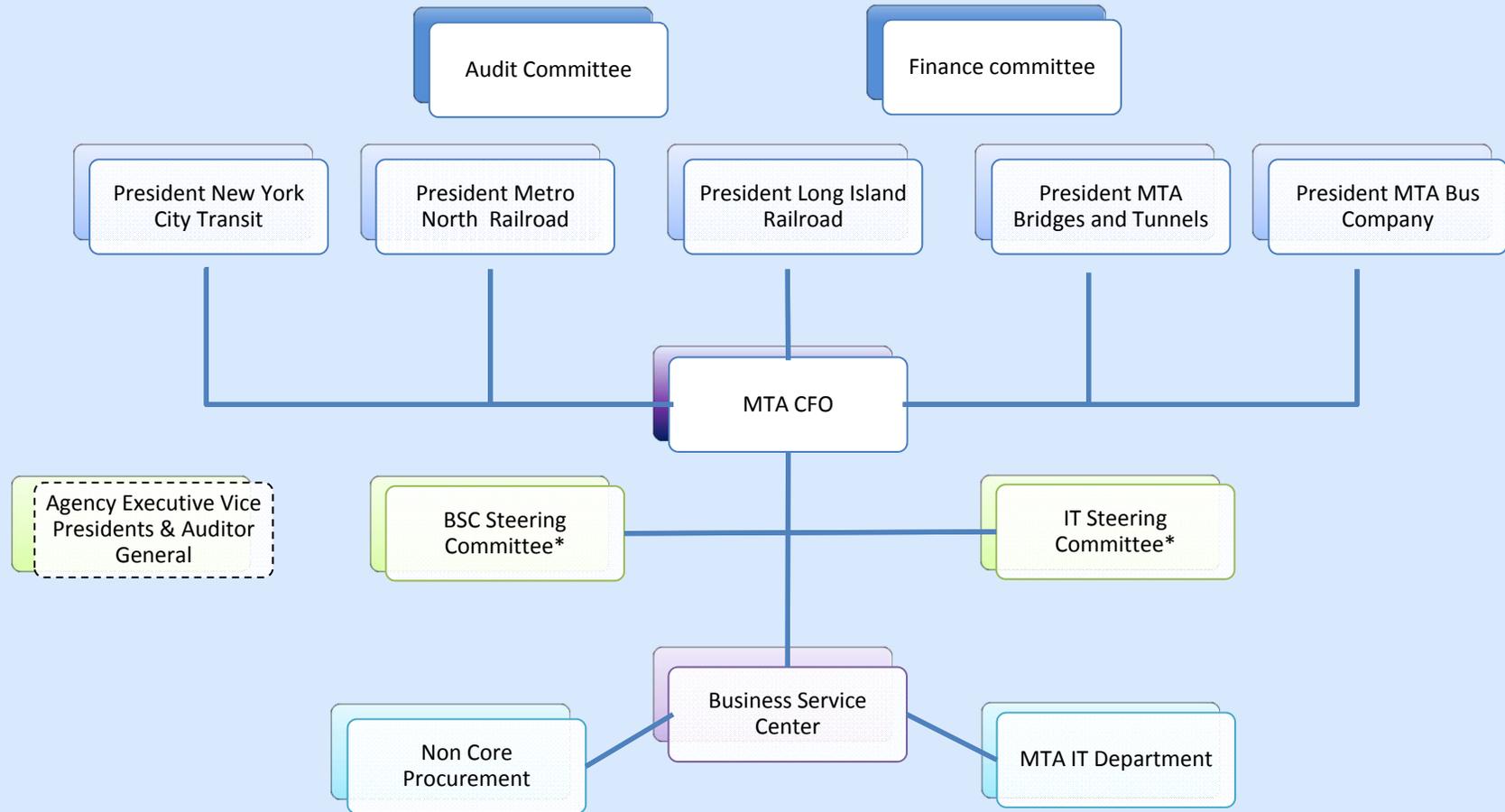
Description	In Progress	Complete	Benefit
E-Mail Rationalization		✓	Multiple e-mail platforms at the MTA are inefficient- rationalizing to a single platform will provide greater value while reducing cost.
Security		✓	24/7/365 security monitoring can be performed by one operations center, instead of several across the MTA with minimum risk.
Data Center & Server Consolidation	✓		The MTA can gradually and systematically shut down 20 data centers, keeping only the three most efficient and resilient ones.
Application Rationalization	✓		Over 700 software applications are currently maintained by MTA staff. By consolidating redundant applications across agencies we can reduce maintenance efforts and devote more resources to application development and the maintenance of a common and current Enterprise Resource Planning (ERP) system.
Voice Communications	✓		Over seven different groups at the MTA manage voice communications. By combining these groups we can standardize on a "one MTA" voice communication system.
WAN		✓	Costly multiple wide area networks can be consolidated into one providing greater capability while reducing cost.
IT Business Management		✓	Each MTA Agency had a separate IT management structure. Better leveraging IT management can result in greater specialization and less duplication in work and staff.
Help Desk	✓		Multiple costly help desks can be consolidated into one, delivering real savings to the MTA.

# Aligning IT Goals with Corporate Priorities

*An IT strategy is really all about how we will use people and technology to develop the innovative solutions necessary to support the mission and vision of the organization, and IT goals must be in alignment with Corporate Priorities.*

IT GOALS	Corporate Priorities			
	A Safe & Secure Network For Our Customers And Employees	Regular Capital Investments To Ensure The Reliability And Resiliency Of The MTA Network	Customer Service	Aggressive Management Of Our Finances
<b>Goal 1: Secure Access to MTA Systems from Any Location, Any Time, on a variety of devices</b>	✓			
<b>Goal 2: An Efficient, Secure, Reliable and Sustainable IT Environment</b>	✓	✓	✓	✓
<b>Goal 3: Governance and Resources That Optimize Technology</b>		✓		✓
<b>Goal 4: Customer-Driven View of IT</b>	✓		✓	
<b>Goal 5: Transform MTA IT into a learning organization</b>			✓	✓

## Governance and oversight interactions for IT and the BSC occur at all management levels



\*The status of major projects is reported at every Steering Committee Meeting; issues are explained and discussed with all agencies



# Key IT Challenges

*A number of key challenges have been identified based on collaborative interactions with the IT Steering Committee and during other Agency Executive outreach sessions conducted by the Chief Information Officer. MTA IT will work to overcome these challenges through our current strategic initiatives.*

## MTA IT Challenges

To implement technology, processes, and data with improved coordination, minimizing stovepipes and duplicated efforts.

To set spending priorities and maintaining project control through the governance processes.

To identify and adopt common and repeatable processes based on business and IT needs.

To increase opportunities to share data and applications.

To communicate effectively and provide a clear understanding of the value that MTA IT delivers to customers.

To mature key functions including enterprise and solutions architecture planning, data, governance, customer relationship management, and vendor management.



# Ensuring Success – Performance Measurement

*Performance measurement will play a critical role in making this IT Strategic Plan relevant and responsive to changing conditions. Measuring performance at various levels and through different lenses will allow us to monitor incremental progress toward achieving our goals, and can help us identify where changes should be made .*

Initiative Name	Performance Measures
<b>Secure Access</b>	<ul style="list-style-type: none"> <li>• Increase in number of mobile users who securely access MTA systems</li> <li>• Increase in number of tools and methodologies provided that support mobile users in securely accessing MTA systems via any approved device</li> <li>• Increase in number of ICS/SCADA (Industrial Control System, Supervisory Control And Data Acquisition) systems being monitored for compliance with relevant security standards.</li> </ul>
<b>IT Service Support Excellence</b>	<ul style="list-style-type: none"> <li>• Increase in availability, quality, and use of self-service offerings</li> <li>• Decrease in help desk tickets for areas solvable by self-service</li> <li>• Decrease in average number of tickets per user</li> </ul>
<b>Application Portfolio Modernization -</b>	<ul style="list-style-type: none"> <li>• Increase in number of applications as well as platforms in the Application Inventory that are capable of using authorized mobile devices and conversely decrease the number of legacy applications and platforms in the Application Inventory that cannot be reengineered to utilize mobile devices</li> <li>• Increase in legacy applications which can be ported to Cloud Based Architectures</li> <li>• Increase in percentage of new applications using Cloud Based Architectures</li> </ul>
<b>Standardized Infrastructure</b>	<ul style="list-style-type: none"> <li>• Decrease in environmental footprint in accordance with MTA IT plans for electronic stewardship and data center consolidation</li> <li>• Increase in availability of demand-based infrastructure</li> </ul>



# Ensuring Success – Performance Measurement (cont'd)

Initiative Name	Performance Measures
<b>Consolidate and Broaden IT Services</b>	<ul style="list-style-type: none"> <li>• Increase in number of hosted commodity, shared, and/or cloud-brokered IT services made available to MTA Business Units</li> <li>• Increase in availability of MTA enterprise data standards</li> <li>• Increase in tools and methods to facilitate enterprise-wide information sharing</li> <li>• Increase in number of virtual server instances using Managed Cloud service providers for support</li> </ul>
<b>Optimized IT Portfolio</b>	<ul style="list-style-type: none"> <li>• Increase percentage of new and/or enhanced projects which use Gartner’s Run, Grow, Transform model</li> <li>• Increase in benefits realized as a result of standards, policy, and governance processes</li> <li>• Increase in number of MTA IT projects actively tracked by the PMO to support a standardized project management approach</li> </ul>
<b>IT Workforce Transformation</b>	<ul style="list-style-type: none"> <li>• Increase in employee engagement survey satisfaction scores</li> <li>• Increase in enhanced skills capacity and capabilities aligned to meet desired service delivery</li> <li>• Increase in IT workforce tools, practices, and processes shared across the MTA IT Divisions</li> </ul>
<b>Unified Vendor Management</b>	<ul style="list-style-type: none"> <li>• Decrease in number of contracts</li> <li>• Savings from economy of scale and Enterprise License Agreements (ELA’s)</li> </ul>
<b>Effective Business Line Partnership</b>	<ul style="list-style-type: none"> <li>• Increase in positive engagements (communications, reviews, customer satisfaction surveys, meetings, consultations) among lines of business, and other strategic partners</li> <li>• Increase in level of user productivity education, awareness, and end-user support</li> </ul>

# Ensuring Success – Performance Measurement (cont'd)

Initiative Name	Performance Measures
<b>Business Capability Consulting</b>	<ul style="list-style-type: none"> <li>• Increase in number of BPM (Business Process Management ) resources, new technologies, and innovative solutions deployed to enhance MTA business capabilities such as cloud-hosted business applications</li> <li>• Increase in number of consultation-driven project proposals successfully implemented</li> </ul>
<b>IT Service Delivery Excellence</b>	<ul style="list-style-type: none"> <li>• Increase in number of IT services that have defined cost drivers and return on investment.</li> <li>• Increase in number of IT services available in an IT service catalog</li> <li>• Increase in number of IT services meeting service-level agreements (SLAs)</li> </ul>
<b>Leverage Emerging Technologies</b>	<ul style="list-style-type: none"> <li>• Increase in number of technology evaluations to determine their usefulness in solving MTA business problems</li> <li>• Increase in number of proof of concept projects initiated to demonstrate viability of the technology in MTA environments</li> <li>• Increase in number of pilot projects to demonstrate use cases in a production environment</li> </ul>
<b>Workforce skills modernization -</b>	<ul style="list-style-type: none"> <li>• Increase in the average number of external training classes attended per IT employee.</li> <li>• Increase in aggregate number and adequate distribution of skills which support modern frameworks and technologies</li> </ul>
<b>Collaborative IT organization</b>	<ul style="list-style-type: none"> <li>• Increase in the number of teams formed using agile development techniques per quarter</li> <li>• Number of “new ideas” which can yield potential business value</li> <li>• Percent increase in use of collaborative tools tracked periodically</li> </ul>



# Questions ?



# MTA AUDIT SERVICES

## 2014 Year End Status and 2015 Proposed Audit Plan



January 20, 2014

# 2014 Audit Plan Summary

## Financial/Operational/Technology

- Projects Completed = 186
- Recommendations = 759
- Savings/Cost Efficiencies = \$ 39.4 M

## Contracts

- Projects Completed = 130
- Pre-Award OH Reviews Done = 152
- \$ Audited = \$ 747 M
- Questioned Costs = \$ 39.5 M

# 2014 Audit Plan

## Superstorm Sandy Audits

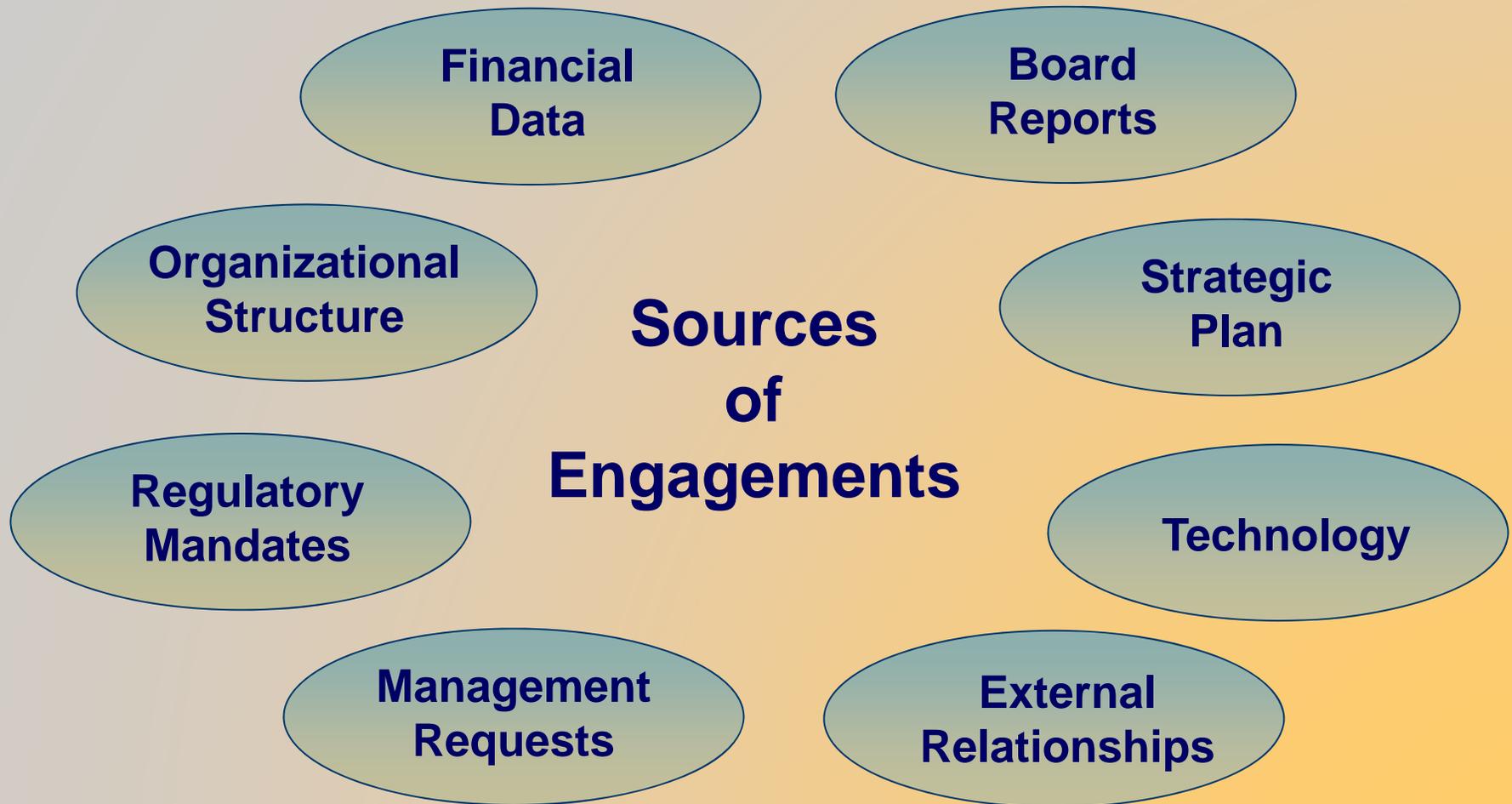
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# MTA AUDIT SERVICES

## 2015 AUDIT PLAN



# The Audit Universe



# *Risk Factor Considerations*

*Financial Exposure*

*Condition of Internal Controls*

*Change in Operation Conditions*

*Impact of Technology*

*Previous Audit Results*

*Management Interest*



**Conducted  
97 Interviews**

# Risk Assessment Results

## *Audit Universe*

**350 Activities**  
**(817 Sub-Activities)**

**2015 Audit Plan**  
**163 Audits**

**22 Low**

**145 Moderate**

**183 High**

**Audit Universe based on a Five Year Cycle**

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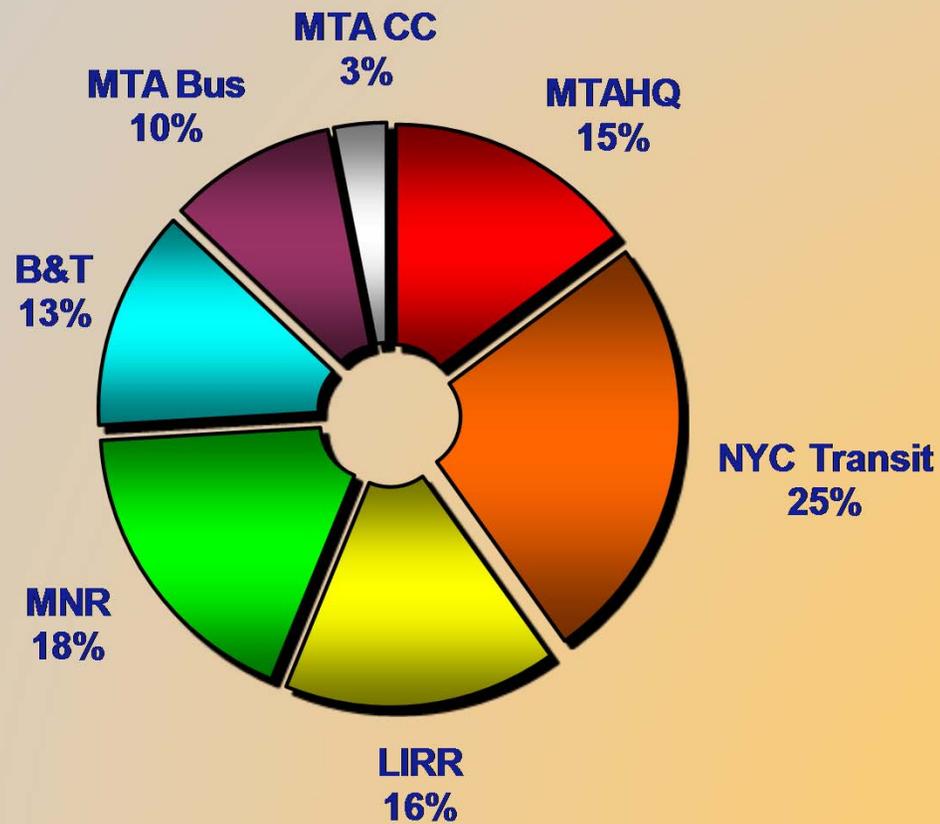
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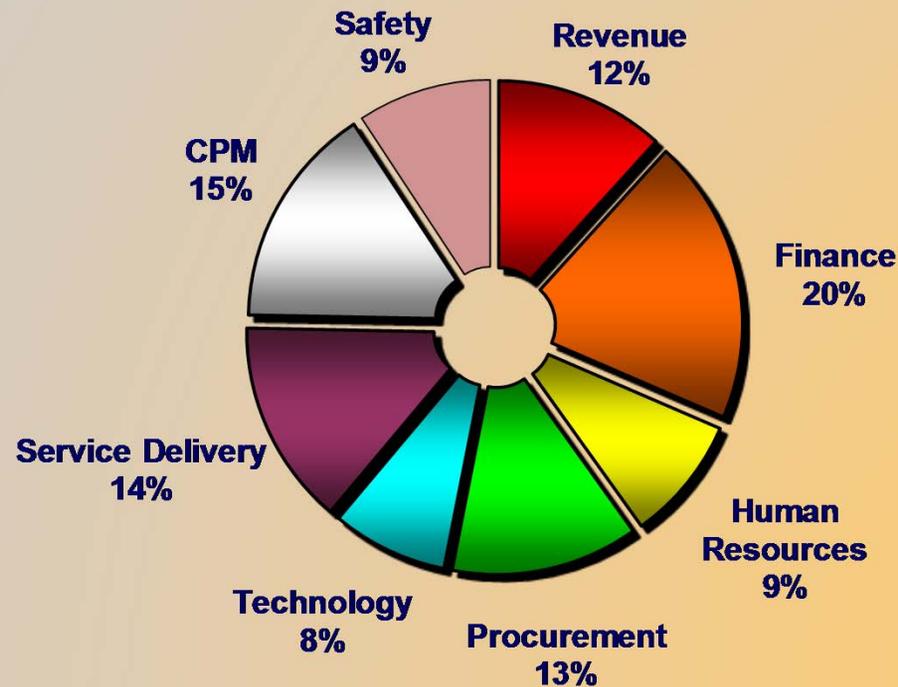
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# 2015 AGENCY RESOURCE ALLOCATION



# 2015 RESOURCE ALLOCATION

*The Metropolitan Transportation Authority Mission is to preserve and enhance the quality of life and economic health of the region it services through the cost-efficient provisions of safe, on-time, reliable, and clean transportation services.*



# 2015 Audit Strategy

- ❑ **Focus Audit work on Governance, Risk, and Internal Control Environment**
- ❑ **Review efficiency & effectiveness of Operations**
- ❑ **Support Agency-wide Goals & Initiatives**
- ❑ **Validate the implementation of Audit Recommendations**

# 2015 Audit Areas

Finance	Safety	Capital Program
<ul style="list-style-type: none"> <li>Treasury</li> <li>Capital Budget</li> <li>Enterprise Asset Management</li> <li>ERM Assessments</li> <li>Advertising Contracts</li> <li>Payroll</li> <li>Accounts Payable</li> <li>Timekeeping</li> <li>Overtime</li> <li>Travel Expenses</li> <li>Prior Audit Recommendations</li> </ul>	<ul style="list-style-type: none"> <li>Blue Ribbon Panel Recs.</li> <li>NTSB / FRA Recommendations</li> <li>Safety Efficiency Testing</li> <li>Operational Training</li> <li>Safety Maintenance Certifications</li> <li>Random Drug &amp; Alcohol Testing</li> </ul>	<ul style="list-style-type: none"> <li>Superstorm Sandy</li> <li>Force Account</li> <li>Fulton Center Closeout</li> <li>7 Line Extension Closeout</li> <li>2<sup>nd</sup> Avenue</li> <li>East Side Access</li> </ul>
	Procurement	Human Resources
	<ul style="list-style-type: none"> <li>Operating Contracts</li> <li>DBE &amp; MW/DBE Programs</li> <li>Procure-to-Pay</li> <li>Inventory Management</li> <li>Utility Payments</li> <li>Third Party Contracts</li> </ul>	<ul style="list-style-type: none"> <li>Medical Services</li> <li>Pensions</li> <li>Employee Availability</li> <li>Workers' Compensation</li> <li>Personnel Action Requests</li> </ul>
Service Delivery		Technology
<ul style="list-style-type: none"> <li>Power Maintenance</li> <li>Signals Maintenance</li> <li>Track Maintenance</li> <li>Depot Operations</li> <li>Bridge &amp; Tunnel Operations</li> <li>Bus Overhauls</li> <li>Station Maintenance</li> <li>Maintenance of Way</li> <li>Car Equipment</li> </ul>	<ul style="list-style-type: none"> <li>Rental Property Income</li> <li>GCT Tenants</li> <li>MetroCard</li> <li>E-ZPass</li> <li>Select Bus Services</li> <li>On-Board Fare Collection</li> <li>Money Rooms</li> </ul>	<ul style="list-style-type: none"> <li>BSC PeopleSoft Upgrade &amp; QA</li> <li>Data Center Operations</li> <li>Disaster Recovery</li> <li>Information Security</li> <li>Thin Client Environment</li> <li>TAB System Implementation</li> <li>IT Transformation</li> <li>Application Controls</li> </ul>

# 2014 Internal Quality Assurance Review

Results: "Fully Complies"		
Seq#	IIA - Audit Elements	Compliance
1	<b>Purpose, Authority &amp; Responsibility</b>	✓
2	<b>Independence &amp; Objectivity</b>	✓
3	<b>Proficiency &amp; Due Professional Care</b>	✓
4	<b>Quality Assurance &amp; Improvement Program</b>	✓
5	<b>Managing the Internal Audit Activity</b>	✓
6	<b>Nature of Work</b>	✓
7	<b>Engagement Planning</b>	✓
8	<b>Performing the Engagement</b>	✓
9	<b>Communicating Results</b>	✓
10	<b>Monitoring Progress</b>	✓
11	<b>Resolution of Management's Acceptance of Risk</b>	✓

# Other Activities

- ❑ Continue to coordinate audit activities with:
  - External Auditors
  - City/State Comptrollers' Offices
  - MTA Chief Compliance Officer
- ❑ Perform Internal Quality Assurance Review

# QUESTIONS?